

DAM 361: BUSINESS COMMUNICATION AND NETWORKS





**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**FACULTY OF SCIENCE**

**COURSE CODE: DAM 361**

**COURSE TITLE: BUSINESS COMMUNICATION AND NETWORKS**

**COURSE  
GUIDE**

**DAM 361  
Business Communication and Networks**

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## Introduction

Business communication and Networks is a Two [2] credit Unit with Twelve units grouped into four modules. It is an introductory course which seeks to introduce the students to the basic concepts of communication, computer networks, Networking, Network Management, Business Organisations, Marketing and Marketing Plan. It provides an introduction to the different types of Networks, the configuration and advantages of these networks, it also covers the basic principles internetworking , internet protocols IP classes and Subnetting. The Course also covers principles of Network management finally the text provides an introduction to the different business organization, marketing and the Marketing plan. This course is divided into four modules.

Module 1 introduces the communication principles, networking, Network topologies, transmission media and Network protocols. The unit lays the foundation for the understanding of the Computer Networks.

Module 2 covers the IEEE 802 LAN standards, Media Access Control and the introduction to the Internet. It also introduces the different classes of the IP addresses, Domain Name System and the Dotted Decimal Notation.

Module 3 describes the principles of Sub netting, Internetworking and Network management. The different internetworking components are given in-depth coverage in the module.

Module 4 has its focus on the business organization, marketing and the marketing plan. In this module the different business organizations the Marketing mix and orientation and the market planning process are treated in this module.

The aim of this course is to equip you with the basic understanding of Networking and business concepts.

This Course Guide gives you a brief overview of the course content, course duration, and course materials.

## What you will learn in this course

The main purpose of this course is to provide the foundational information necessary for the understanding of computer networks and networking and provide the necessary tool for the analysis and design of computer networks and business concepts, we intend to achieve through the following:

### Course Aims

- i. Introduce the concepts associated with computer networks and Networking.
- ii. Introduce the concepts associated with business organizations, marketing and marketing plan;

### Course Objectives

Certain objectives have been set out to ensure that the course achieves its aims.

Apart from the course objectives, every unit of this course has set objectives. In

The course of the study, you will need to confirm, at the end of each unit, if you

Have met the objectives set at the beginning of each unit. By the end of this

Course you should be able to:

#### Objective:

1. To introduce to the students the concept of Communications Technology, LAN and WAN basics, networking and protocols, Ethernet, ATM, Packet Switching, internetworking, TCP/IP architecture and Internet applications.
2. Explain the importance of data networks and the Internet in supporting business communications and everyday activities.
3. Explain how communication works in data networks and the Internet.
4. Recognize the devices and services that are used to support communications across an Internetwork.
5. Use network protocol models to explain the layers of communications in data networks.
6. Describe the importance of addressing and naming schemes at various layers of data networks.
7. Describe the protocols and services provided by the Application layer of the OSI and TCP/IP.
8. Analyse the operations and features of the Transport layer protocols and services.
9. Analyse the operations and feature of the Network layer protocols and services and explain the fundamental concepts of routing.

10. Design, calculate, and apply subnet masks and addresses to fulfill given requirements.
11. Describe the operation of protocols at the Data link layer and explain how they support communications.
12. Explain the role of Physical layer protocols and services in communications across data networks.
13. Explain fundamental Ethernet concepts such as media, services, and operation.
14. Employ basic cabling and network designs to connect devices in accordance with stated objectives.
15. Build a simple Ethernet network using routers and switches.
16. Analyse the operations and features of common Application layer.
17. Utilize common network utilities to verify small network operations and analyse data traffic.
18. Analyse business organizations
19. Develop marketing plans

### Working Through This Course

In order to have a thorough understanding of the course units, you will need to read and understand the contents, practise the what you have learnt by studying the network of your organization or proposing one if there is none in existence., and be committed to learning and implementing your knowledge.

This course is designed to cover approximately sixteen weeks, and it will require your devoted attention. You should do the exercises in the Tutor-Marked Assignments and submit to your tutors.

### Course Materials

These include:

Course Guide

Study Units

Recommended Texts

A file for your assignments and for records to monitor your progress.



## Study Units

There are Twelve study units in this course:

### Module1

Unit 1	Introduction to Communication Networks
Unit 2	Transmission Media
Unit 3	Network Protocols

### Module 2

Unit 1	IEEE 802 LAN Standards
Unit 2	Media Access Control
Unit 3	Introduction to the Internet

### Module 3

Unit 1	Subnetting
Unit 2	Internetworking
Unit 3	Network Management

### Module 4

Unit 1	Business Organizations
Unit 2	Marketing
Unit 3	Marketing Plan

Make use of the course materials, do the exercises to enhance your learning.

### Textbooks and References

1. Data Communications and Networking, Forouzan, B. A, 3rd Ed. (2004), McGraw-Hill.
2. Computer Communications and Networking Technologies, M.A. Gallo and W.M Hancock, (2002), Brooks/Cole.
3. Business Data Communications & Networking, Fitzgerald & Dennis, 6<sup>th</sup> Ed. (1999), John Wiley & Sons
4. Data and Computer Communications, Stallings W, 5<sup>th</sup> Ed. (1997), Prentice Hall, NJ,
5. Business Data Communications and Networking, Fitzgerald and Dennis, ,John Wiley and Sons, 7th Edition, 2002
6. Applied Data Communications: A Business-Oriented Approach, 4th Edition Goldman James E. & Rawles Phillip T, John Wiley & Sons, 2003
7. Networking Series (Parts 1-6), Chappell David, Videos from Chappell and Associates
8. Periodical and Technical References of Text book by Goldman <http://www.wiley.com/college/goldman/ref.html>
9. Haykin, Simon, Communication Systems, Third Edition, John Wiley & Sons, N.Y. (1994).
10. Halsal, Fred, Data Communications, Computer Networks and Open Systems, Fourth Edition, Addison-Wesley Publishing Co. (1996).
11. Editors of LAN Magazine, LAN Tutorial, Second Edition, Miller Freeman Inc., San Francisco (1992).
12. Comer, Douglas E., Computer Networks and Internets, Second Edition, Prentice-Hall International, Inc., N.J. (1999).
13. Computer Networks, 4th Edition by Andrew S. Tanenbaum
14. Computer Communications and Networking Technologies by Michael A.
15. Business Data Communications and Networking, 7th Edition Jerry FitzGerald, Alan Dennis
16. Business Data Networks and Telecommunications, fourth edition, by Raymond R. Panko.
17. TCP/IP for Windows2000 by Houde and Hoffman.

### Assignments File

These are of two types: the self-assessment exercises and the Tutor-Marked Assignments. The self-assessment exercises will enable you monitor your performance by yourself, while the Tutor- Marked Assignment is a supervised assignment. The assignments take a certain percentage of your total score in this course. The Tutor - Marked Assignments will be assessed by your tutor within a specified period. The examination at the end of this course will aim at determining the level of mastery of the subject matter. This course includes seventeen Tutor-Marked Assignments and each must be done and submitted accordingly. Your best scores however, will be recorded for you. Be sure to send these assignments to your tutor before the deadline to avoid loss of marks.

## Presentation Schedule

The *Presentation Schedule* included in your course materials gives you the important dates for the completion of tutor marked assignments and attending tutorials. Remember, you are required to submit all your assignments by the due date. You should guard against lagging behind in your work.

## Assessment

There are two aspects to the assessment of the course. First are the tutor marked assignments; second, is a written examination.

In tackling the assignments, you are expected to apply information and knowledge acquired during this course. The assignments must be submitted to your tutor for formal assessment in accordance with the deadlines stated in the

Assignment File. The work you submit to your tutor for assessment will count for 30% of your total course mark.

At the end of the course, you will need to sit for a final three-hour examination. This will also count for 70% of your total course mark.

## Tutor Marked Assignments (TMAS)

There are seventeen tutor marked assignments in this course. You need to submit all the assignments. The total marks for the best four (4) assignments will be 30% of your total course mark.

Assignment questions for the units in this course are contained in the Assignment File. You should be able to complete your assignments from the information and materials contained in your set textbooks, reading and study units. However, you may wish to use other references to broaden your viewpoint and provide a deeper understanding of the subject.

When you have completed each assignment, send it together with form to your tutor. Make sure that each assignment reaches your tutor on or before the deadline given. If, however, you cannot complete your work on time, contact your tutor before the assignment is done to discuss the possibility of an extension.

## Examination and Grading

The final examination for the course will carry 70% of the total marks available for this course. The examination will cover every aspect of the course, so you are advised to revise all your corrected assignments before the examination.

This course endows you with the status of a teacher and that of a learner. This means that you teach yourself and that you learn, as your learning capabilities would allow. It also means that you are in a better position to determine and to ascertain the what,

the how, and the when of your course learning. No teacher imposes any method of learning on you.

The course units are similarly designed with the introduction following the table of contents, then a set of objectives and then the concepts and so on.

The objectives guide you as you go through the units to ascertain your knowledge of the required terms and expressions.

### Course Marking Scheme

This table shows how the actual course marking is broken down.

Assessment	Marks
Assignment 1- 4	Four assignments, best three marks of the four count at 30% of course marks
Final Examination	70% of overall course marks
Total	100% of course marks

Table 1: Course Marking Scheme

#### Course Overview

Unit	Title of Work	Weeks Activity	Assessment (End of Unit)
	Course Guide	Week 1	
	Module 1		
1	Introduction to Communication Networks	Week 1-2	Assignment 1
2	Transmission Media	Week 3	Assignment 2
3	Network Protocols	Week 4	Assignment 3
	Module 2		
1	IEEE 802 LAN Standards	Week 5-6	Assignment 4
2	Media Access Control	Week 7-8	Assignment 5
3	Introduction to the Internet		
	Module 3		
1	Subnetting	Week 9	
2	Internetworking	Week 10-11	
3	Network management	Week 12	Assignment 6
	Module 4		
1	Business Organization	Week 13	Assignment 7
2	Marketing	Week 14	Assignment 8
3	Marketing Plan	Week 15	
	Revision	Week 16	
	Examination	Week 17	
Total		17 weeks	

## How to get the best from this course

In distance learning the study units replace the university lecturer. This is one of the great advantages of distance learning; you can read and work through specially designed study materials at your own pace, and at a time and place that suit you best. Think of it as reading the lecture instead of listening to a lecturer. In the same way that a lecturer might set you some reading to do, the study units tell you when to read your set books or other material. Just as a lecturer might give you an in-class exercise, your study units provide exercises for you to do at appropriate points.

Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit and how a particular unit is integrated with the other units and the course as a whole. Next is a set of learning objectives. These objectives enable you know what you should be able to do by the time you have completed the unit. You should use these objectives to guide your study. When you have finished the units, you must go back and check whether you have achieved the objectives. If you make a habit of doing this you will significantly improve your chances of passing the course.

Remember that your tutor's job is to assist you. When you need help, don't hesitate to call and ask your tutor to provide it.

Read this *Course Guide* thoroughly.

Organize a study schedule. Refer to the 'Course Overview' for more details. Note the time you are expected to spend on each unit and how the assignments relate to the units. Whatever method you chose to use, you should decide on it and write in your own dates for working on each unit.

Once you have created your own study schedule, do everything you can to stick to it. The major reason that students fail is that they lag behind in their course work.

Turn to *Unit 1* and read the introduction and the objectives for the unit.

Assemble the study materials. Information about what you need for a unit is given in the 'Overview' at the beginning of each unit. You will almost always need both the study unit you are working on and one of your set of books on your desk at the same time.

Work through the unit. The content of the unit itself has been arranged to provide a sequence for you to follow. As you work through the unit you will be instructed to read sections from your set books or other articles. Use the unit to guide your reading.

Review the objectives for each study unit to confirm that you have achieved them. If you feel unsure about any of the objectives, review the study material or consult your tutor.

When you are confident that you have achieved a unit's objectives, you can then start on the next unit. Proceed unit by unit through the course and try to pace your study so that you keep yourself on schedule.

When you have submitted an assignment to your tutor for marking, do not wait for its return before starting on the next unit. Keep to your schedule. When the assignment is returned, pay particular attention to your tutor's comments, both on the tutor -marked assignment form and also written on the assignment. Consult your tutor as soon as possible if you have any questions or problems.

After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit objectives (listed at the beginning of each unit) and the course objectives (listed in this *Course Guide*).

### Tutors and Tutorials

There are 12 hours of tutorials provided in support of this course. You will be notified of the dates, times and location of these tutorials, together with the name and phone number of your tutor, as soon as you are allocated a tutorial group.

Your tutor will mark and comment on your assignments, keep a close watch on your progress and on any difficulties, you might encounter and provide assistance to you during the course. You must mail or submit your tutor-marked assignments to your tutor well before the due date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible.

Do not hesitate to contact your tutor by telephone, or e-mail if you need help. The following might be circumstances in which you would find help necessary. Contact your tutor if:

- you do not understand any part of the study units or the assigned readings,
- you have difficulty with the self-tests or exercises,
- you have a question or problem with an assignment, with your tutor's comments on an assignment or with the grading of an assignment.

You should try your best to attend the tutorials. This is the only chance to have face to face contact with your tutor and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from course tutorials, prepare a question list before attending them. You will learn a lot from participating in discussions actively.

### Summary

Business communications and networks, introduces you to basic principles and concepts of computer networks and business organizations as well as networking and internetworking. The skills you need to understand the basics of computer networks ,networking etc. are intended to be acquired in this course. The content of the course material was planned and written to ensure that you acquire the proper knowledge and skills for the appropriate situations. Real-life situations have been created to enable you identify with and create some of your own. The essence is to get you to acquire the necessary knowledge and competence, and by equipping you with the necessary tools, we hope to have achieved that.

I wish you success with the course and hope that you will find it both interesting and useful.

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