FAKULTI TEKNOLOGI DAN KEJURUTERAAN

PROGRAM	**Diploma in Computer Network**
COURSE NAME	**Network Security**
COURSE CODE	**DNC 4023**
CREDIT HOUR	**3**
SYNOPSIS	A course introducing the fundamentals concepts of securing the computer networking. Describes the functions of trojan, virus and firewall. Covers the principles about 'cryptography'; learning about how to avoid from 'hijacking'; securing of operating system.
COURSE STRUCTURE	
CHAPTER	**TOPICS**
1	**Introduction** 1.1 Definition 1.2 Basic Network security concepts 1.3 Security threats
2	**Information technology security** 2.1 Definitions 2.2 Systems 2.3 Types
3	**Virus, Trojans and worms** 3.1 Introduction to virus, Trojan horse and warm 3.2 Anatomy of virus 3.3 How to protect against malicious software

4	**Firewalls, VPN and wireless security** 4.1 Introduction 4.2 Firewall security and concepts 4.3 Packet filtering 4.4 Firewall architectures and types of firewalls
5	**Authentication** 5.1 Concept 5.2 Technique 5.3 Problem
6	**Cryptography** 6.1 Overview of cryptography 6.2 Problems with cryptography 6.3 Conventional and public-key encryption 6.4 Encryption algorithms 6.5 Confidentiality 6.6 Key distribution 6.7 Message authentication
7	**Cyber Crimes** 7.1 Types of cybercrimes 7.2 Prevention strategies
8	**Hackers** 8.1 Definitions 8.2 Types 8.3 Software

9	**Operating system security Definition** 9.1 Disaster data recovery and computer forensics
10	**Session hijacking** 10.1 Introduction of session hijacking 10.2 How to protect against session hijacking
11	**Intrusion detection** 11.1 Types of system 11.2 Services 11. 3 Comparison
12	**Security evaluations of Computer Products** 12.1 Technologies example 12.2 Benefits
13	**Mobile network infrastructure and protocols** 13.1 Security protocols and operations 13.2 Concept
References:	1. Doug Lowe. (2018). Networking all-in-one for dummies. 7th ed. Hoboken, New Jersey: John Wiley & Sons, Incorporated. **2.** Charles P. Pfleeger, Shari Lawrence. (2018). Security in Computing. 5th Edition. Prentice-Hall International,