

# FACULTY OF SCIENCES

SYLLABUS FOR THE BATCH FROM THE YEAR 2022 TO YEAR 2025

**Programme Code: BSNM**

**Programme Name: B.Sc. Non-Medical**

**(Semester I-IV)**

**(ABILITY ENHANCEMENT PAPER: COMPUTER SCIENCE SYLLABUS)**

**Examinations: 2022-25**



**Department of Physics**

**Khalsa College, Amritsar**

*(An Autonomous College)*

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(b) Subject to change in the syllabi at any time.  
(c) Please visit the college website time to time.

**B.SC. (NON-MEDICAL) SEMESTER-I**  
**CODE: NMC-111**  
**ABILITY ENHANCEMENT PAPER: COMPUTER SCIENCE**

**Time: 3 Hours**

**Credit Hours (per week):2**

**Total Hours: 30**

**Total Marks: 50**

**(Theory Marks: 25+ Practical:25)**

**Pass Marks: 35%**

**INSTRUCTIONS:**

*1. There will be eight short answer type questions of three marks each and students can attempt only five questions from these eight questions.*

*2. There will be three long answer type questions of five marks each and students can attempt only two questions.*

**COURSE OBJECTIVE:** This course has been formulated to enhance student's ability/skill to understand the basics of computer, components and generations of computer, memory storage, knowledge of software and hardware, applications of computer, working and applications of MS word.

**COURSE CONTENT:**

**Section-A**

Introduction: Definition of Computer, Components of Computer, Generations of Computer, Computer Memory: Primary Storage and Secondary Storage, Software and Hardware, Applications of Computer.

**Section-B**

General Concept of Ms Word: Overview, Creating, Opening, Editing, Formatting, Spell-Grammar Checking, Table Handling, Printing and Saving.

**(PRACTICAL)**

Working with Ms Word

**BOOKS PRESCRIBED:**

1. Computer Fundamentals:-P.K.Sinha
2. Introduction to Computers:- N. Subramanian
3. Introduction to Computers:- Peter Norton Mcgraw Hill

**Course Outcomes:**

<b>Sr. No.</b>	<b>On completing the course, the students will be able to:</b>
CO1	Understand the world of computer, and information & technology.
CO2	Understand the importance of hardwares and softwares of computers.
CO3	Understand the storage of data, memory devices.
CO4	Understand the applications of computer in our daily life, and in science & technology.
CO5	Understand the basics, working and use of ms word.

**B.SC. (NON-MEDICAL) SEMESTER-II**  
**CODE: NMC-121**  
**ABILITY ENHANCEMENT PAPER: COMPUTER SCIENCE**

**Time: 3 Hours**

**Credit Hours (per week):2**

**Total Hours: 30**

**Total Marks: 50**

**(Theory Marks: 25+ Practical:25)**

**Pass Marks: 35%**

**INSTRUCTIONS:**

*1. There will be eight short answer type questions of three marks each and students can attempt only five questions from these eight questions.*

*2. There will be three long answer type questions of five marks each and students can attempt only two questions.*

**COURSE OBJECTIVE:** This course has been formulated to enhance student's ability/skill to understand the Input/output Devices of computer, Internet and its applications, working of Search Engine, Use of electronic mail, working and applications of Excel & ms power point.

**COURSE CONTENT:**

**Section-A**

Input/output Devices, Internet and its applications, working knowledge of Search Engine, Use of electronic mail.

**Section-B**

Excel: Worksheet overview, Creating worksheet, Opening and Saving, Editing, Formatting, Creating formulas, Charts; Ms Power point: Templates, Views, Formatting text, Slide Show, Adding new slides, Modifying Slides, Slides with Graphs.

**(PRACTICAL)**

Working with Ms Excel and Ms Power point

**BOOKS PRESCRIBED:**

1. Computer Fundamentals:-P.K.Sinha
2. Introduction to Computers:- N. Subramanian
3. Introduction to Computers:- Peter Norton Mcgraw Hill

**Course Outcomes:**

<b>Sr. No.</b>	<b>On completing the course, the students will be able to:</b>
CO1	Understand different Input/output Devices of computer.
CO2	Understand the applications of Internet.
CO3	Understand the working and benefits of Search Engine.
CO4	Understand the use of electronic mail.
CO5	Work with excel and MS Power point.

**B.SC. (NON-MEDICAL) SEMESTER-III**  
**CODE: NMC-231**  
**ABILITY ENHANCEMENT PAPER: COMPUTER SCIENCE**

**Time: 3 Hours**

**Credit Hours (per week):2**

**Total Hours: 30**

**Total Marks: 50**

**(Theory Marks: 25+ Practical:25)**

**Pass Marks: 35%**

**INSTRUCTIONS:**

*1. There will be eight short answer type questions of three marks each and students can attempt only five questions from these eight questions.*

*2. There will be three long answer type questions of five marks each and students can attempt only two questions.*

**COURSE OBJECTIVE:** This course has been formulated to enhance student's ability/skill to understand the basics of computer, basics of operating system, functions of operating system, types of operating system, Fundamental of MS-DOS, Internal and external commands of MS-DOS.

**COURSE CONTENT:**

**Section-A**

Introduction to Operating System; Definition of Operating System; Operating System as a resource manager; Functions of Operating System: Process management, Memory management, File management, Device management, Security; Types of Operating System (multiprogramming, multitasking and time sharing) along with advantages/disadvantages and examples.

**Section-B**

Introduction to MS-DOS; Booting and its types; DOS Commands; Internal commands: TIME, DATE, COPY, CLS, DIR, COPYCON, REN, DEL, MD, CD etc.; External commands: XCOPY, DISKCOPY, DISKCOM, TREE, DELTREE, FORMAT, BACKUP, PRINT etc.

**(PRACTICAL)**

**BOOKS PRESCRIBED:**

1. Practice and Practical work from sections A & B (Above)
2. Extended features of Ms Excel and Ms Power point.
4. PC Software: Rachpal Singh & Gurinder Singh
5. Computer Fundamentals by Peter Norton.

**Course Outcomes:**

<b>Sr. No.</b>	<b>On completing the course, the students will be able to:</b>
CO1	Understand the world of computer, features and applications.
CO2	Understand the operating system.
CO3	Understand different operating system.
CO4	Understand the Fundamental of Dos, commands of Dos.
CO5	Understand the Extended features of Excel and power point.

**B.SC. (NON-MEDICAL) SEMESTER-IV**  
**CODE: NMC-241**  
**ABILITY ENHANCEMENT PAPER: COMPUTER SCIENCE**

**Time: 3 Hours**

**Credit Hours (per week):2**

**Total Hours: 30**

**Total Marks: 50**

**(Theory Marks: 25+ Practical:25)**

**Pass Marks: 35%**

**INSTRUCTIONS:**

*1. There will be eight short answer type questions of three marks each and students can attempt only five questions from these eight questions.*

*2. There will be three long answer type questions of five marks each and students can attempt only two questions.*

**COURSE OBJECTIVE:** This course has been formulated to enhance student's ability/skill to understand the WWW, Working of WWW, Web browsing, Introduction of HTML, History of HTML, Web designing using HTML.

**COURSE CONTENT:**

**Section-A**

Introduction of WWW, Working of WWW, Web browsing (Opening, Viewing, Saving and Printing a web page and bookmark).

**Section-B**

Introduction of HTML; HTML element; History of HTML, Steps to create first web page using notepad; HTML basics examples.

**(PRACTICAL)**

Practice and Practical work from sections A & B (Above)

**BOOKS PRESCRIBED:**

1. HTML: The complete reference by Thomas A. Powell
2. Patrick Carey: HTML, XHTML and XML, A Course technology CENGAGE Learning, 2010.
3. Introduction to Computers:- Peter Norton Mcgraw Hill

**Course Outcomes:**

<b>Sr. No.</b>	<b>On completing the course, the students will be able to:</b>
CO1	Understand the Working of WWW.
CO2	Understand the Web browsing (Opening, Viewing, Saving and Printing a web page and bookmark).
CO3	Understand HTML.
CO4	Understand Web designing using HTML.
CO5	Understand different advanced features of WWW, HTML.