I. K.Gujral Punjab Technical University
B.Sc. Graphics & Web Designing
Course Outcome 3 Years- 6 Semesters

First Semester

Course Code	Course Type	Course Title	Load Allocation			Marks Distribution		Total Marks	Credits
			L	T	P	Internal	External		
UGCA1901	Core Theory	Mathematics	3	1	0	40	60	100	4
UGCA1902	Core Theory	Fundamentals of Computer and IT	3	1	0	40	60	100	4
UGWD1901	Core Theory	Introduction to Scripting Languages	3	1	0	40	60	100	4
UGCA1904	Practical/Laboratory	Workshop on Desktop Publishing	0	0	4	60	40	100	2
UGWD1902	Core Practical/Laboratory	Introduction to Scripting Languages Laboratory	0	0	4	60	40	100	2
UGCA1906	Core Practical/Laboratory	Fundamentals of Computer and IT Laboratory	0	0	4	60	40	100	2
BTHU103/18	Ability Enhancement Compulsory Course (AECC)-I	English	1	0	0	40	60	100	1
BTHU104/18	Ability Enhancement Compulsory Course (AECC)	English Practical/Laboratory	0	0	2	30	20	50	1
HVPE101-18	Ability Enhancement Compulsory Course (AECC)	Human Values, De-addiction and Traffic Rules	3	0	0	40	60	100	3
HVPE102-18	Ability Enhancement Compulsory Course (AECC)	Human Values, De-addiction and Traffic Rules (Lab/ Seminar)	0	0	1	25	--**	25	1
BMPD102-18		Mentoring and Professional Development	0	0	1	25	--**	25	1
	TOTAL		**13**	**3**	**16**	**460**	**440**	**900**	**25**

**The Human Values, De-addiction and Traffic Rules (Lab/ Seminar) and Mentoring and Professional Development course will have internal evaluation only. (See guidelines at the last page of this file)

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Second Semester

Course Code	Course Type	Course Title	Load Allocation			Marks Distribution		Total Marks	Credits
			L	T	P	Internal	External		
UGCA1907	Core Theory	Fundamentals of Statistics	3	1	0	40	**60**	100	4
UGWD1903	Core Theory	Concepts of Website Designing and Development	3	1	0	40	**60**	100	4
UGCA1909	Core Theory	Object Oriented Programming using C++	3	1	0	40	**60**	100	4
UGCA1910	Core Practical/Laboratory	Object Oriented Programming using C++ Laboratory	0	0	4	60	40	100	2
UGCA1911	Core Practical/Laboratory	Fundamentals of Statistics Laboratory	0	0	4	60	40	100	2
UGWD1904	Practical/Laboratory	Workshop on Digital Image Editing	0	0	4	60	40	100	2
EVS102-18	Ability Enhancement Compulsory Course (AECC) -III	Environmental Studies	2	0	0	40	60	100	2
BMPD202-18		Mentoring and Professional Development	0	0	1	25	--	25	1
	TOTAL		**11**	**3**	**13**	**365**	**360**	**725**	**21**

Course Code: UGCA1901
Course Name: Mathematics

Program: B.Sc in Graphics and Web Designing	**L:** 3 **T:** 1 **P:** 0
Branch: Computer Applications	**Credits:** 4
Semester: 1st	**Contact hours:** 44 hours
Internal max. marks: 40	**Theory/Practical:** Theory
External max. marks: 60	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status: core/elective:** Core

Prerequisite: Student must have the knowledge of Basic Mathematics.
Co requisite:NA.
Additional material required in ESE: Minimum two exercises of each concept will be recorded in the file and the file will be submitted in End Semester Examinations.

Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	Represent data using various mathematical notions.
CO2	Explain different terms used in basic mathematics.
CO3	Describe various operations and formulas used to solve mathematical problems.

Course Code: UGCA1902
Course Name: Fundamentals of Computer and IT

Program: B.Sc in Graphics and Web Designing	**L**: 3 **T**: 1 **P**: 0
Branch: Computer Applications	**Credits:** 4
Semester: 1st	**Contact hours:** 44 hours
Internal max. marks: 40	**Theory/Practical:** Theory
External max. marks: 60	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status:** Core

Prerequisite: -NA-
Co requisite: -NA-

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Additional material required in ESE: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	Understanding the concept of input and output devices of Computers
CO2	Learn the functional units and classify types of computers, how they process information and how individual computers interact with other computing systems and devices.
CO3	Understand an operating system and its working, and solve common problems related to operating systems
CO4	Learn basic word processing, Spreadsheet and Presentation Graphics Software skills.
CO5	Study to use the Internet safely, legally, and responsibly

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Course Outcome 3 Years- 6 Semesters

Course Code: UGWD1901
Course Name: Introduction to Scripting languages

Program: B.Sc in Graphics and Web Designing	**L**: 3 **T**: 1 **P**: 0
Branch: Computer Applications	**Credits:** 4
Semester: 1st	**Contact hours:** 44 hours
Theory/Practical: Theory	**Theory/Practical:** Theory
Internal max. marks: 40	**Duration of end semester exam (ESE):** 3hrs
External max. marks: 60	**Elective status:** Core
Total marks: 100	

Prerequisite: -NA-
Co requisite: -NA-
Additional material required in ESE: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	Student should be able to understand various tags under HTML.
CO2	Students should be able to write HTML programs.
CO3	To develop HTML pages and websites.

Course Code: UGCA1904
Course Name: Workshop on Desktop Publishing

Program: B.Sc in Graphics and Web Designing	**L**: 0 **T**: 0 **P**: 4
Branch: Computer Applications	**Credits**: 2
Semester: 1st	**Contact hours**: 4 Hours per week
Internal max. marks: 60	**Theory/Practical**: Practical
External max. marks: 40	**Duration of end semester examinations (ESE):** 3hrs
Total marks: 100	**Elective status**: Core

Prerequisite: Students must have basic understanding of designing/ Painting tools.
Co requisite: Printing & Publishing tools.
Additional material required in ESE: Softcopy & Hardcopy of the exercises are to be maintained during the practical labs and to be submitted during the End Semester Examinations.

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Course Outcome 3 Years- 6 Semesters

Course Code: UGWD1902
Course Name: Introduction to Scripting languages Laboratory

Program: B.Sc in Graphics and Web Designing	**L**: 0 **T**: 0 **P**: 4
Branch: Computer Applications	**Credits**: 2
Semester:1st	**Contact hours:** 4 Hours per week
Theory/Practical: Practical	**Duration of end semester exam (ESE):** 3hrs
Internal max. marks: 60	**Elective status:** Core
External max. marks: 40	
Total marks:100	

Prerequisite: -NA-
Co requisite: -NA-
Additional material required in ESE: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	Student should be able to understand various tags under HTML.
CO2	Students should be able to write HTML programs.
CO3	To develop HTML pages and websites.

Course Code: UGCA1906
Course Name: Fundamentals of Computer and IT Laboratory

Program: B.Sc in Graphics and Web Designing	**L**: 0 **T**: 0 **P**: 4
Branch: Computer Applications	**Credits:** 2
Semester: 1st	**Contact hours:** 4 Hours per week
Internal max. marks: 60	**Theory/Practical:** Practical
External max. marks: 40	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status:** Core

Prerequisite: -NA-
Co requisite: -NA-
Additional material required in ESE: - NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	Familiarizing with Open Office (Word processing, Spreadsheets and Presentation).
CO2	To acquire knowledge on editor, spread sheet and presentation software.
CO3	The students will be able to perform documentation and accounting operations.
CO4	Students can learn how to perform presentation skills.

I. K.Gujral Punjab Technical University
B.Sc. Graphics & Web Designing
Course Outcome **3 Years- 6 Semesters**

Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	The objective of this course is to introduce students to the theory, fundamentals and tools of communication.
CO2	To help the students become the independent users of English language.
CO3	To develop in them vital communication skills which are integral to their personal, social and professional interactions.
CO4	The syllabus shall address the issues relating to the Language of communication. Students will become proficient in professional communication such as interviews, group discussions, office environments, important reading skills as well as writing skills such as report writing, note taking etc.

AECC (For UGC courses)
BTHU103-18 English:

Program: B.Sc in Graphics and Web Designing	**L: 1 T: 0 P: 0**
Branch: Computer Applications	**Credits: 1**
Semester: 1st	**Contact hours: --**
Theory/Practical: Theory	**Percentage of numerical/design problems: --**
Internal max. marks: 40	**Duration of end semester exam (ESE): --**
External max. marks: 60	**Elective status: core/elective: --**
Total marks: 100	

I. K.Gujral Punjab Technical University
B.Sc. Graphics & Web Designing
Course Outcome 3 Years- 6 Semesters

Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	The objective of this course is to introduce students to the theory, fundamentals and tools of communication.
CO2	To help the students become the independent users of English language.
CO3	To develop in them vital communication skills which are integral to their personal, social and professional interactions.
CO4	The syllabus shall address the issues relating to the Language of communication. Students will become proficient in professional communication such as interviews, group discussions, office environments, important reading skills as well as writing skills such as report writing, note taking etc.

AECC
BTHU104/18 English Practical/Laboratory

Program: B.Sc in Graphics and Web Designing	**L**: 0 **T**: 0 **P**: 2
Branch: Computer Applications	**Credits:** 1
Semester: 1st	**Contact hours:**
Theory/Practical: Practical	**Percentage of numerical/design problems: --**
Internal max. marks: 30	**Duration of end semester exam (ESE):**
External max. marks: 20	**Elective status:**
Total marks: 50	

Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	The objective of this course is to introduce students to the theory, fundamentals and tools of communication.
CO2	To help the students become the independent users of English language.
CO3	To develop in them vital communication skills which are integral to their personal, social and professional interactions.
CO4	The syllabus shall address the issues relating to the Language of communication. Students will become proficient in professional communication such as interviews, group discussions, office environments, important reading skills as well as writing skills such as report writing, note taking etc.

I. K.Gujral Punjab Technical University
B.Sc. Graphics & Web Designing
Course Outcome 3 Years- 6 Semesters

Course Code: HVPE101-18
Course Name: Human Values, De-addiction and Traffic Rules

Program: B.Sc in Graphics and Web Designing	**L**: 3 **T**: 0 **P**: 0
Branch: Computer Applications	**Credits:** 3
Semester: 1st	**Contact hours:** 33 hours
Internal max. marks: 40	**Theory/Practical:** Theory
External max. marks: 60	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status:** Ability Enhancement

Prerequisite: -NA-
Co requisite: -NA-
Additional material required in ESE: -NA-

CO#	Course outcomes
CO1	To help the students appreciate the essential complementarily between 'VALUES' and 'SKILLS' to ensure sustained happiness and prosperity which are the core aspirations of all human beings.
CO2	To facilitate the development of a Holistic perspective among students towards life, profession and happiness, based on a correct understanding of the Human reality and the rest of Existence. Such a holistic perspective forms the basis of Value based living in a natural way.
CO3	To highlight plausible implications of such a Holistic understanding in terms ofethical human conduct, trustful and mutually satisfying human behavior and mutually enriching interaction with Nature.

Note: This course is intended to provide a much needed orientational input in Value Education to the young enquiring minds.

Course Code: HVPE102-18
Course Name: Human Values, De-addiction and Traffic Rules (Lab/ Seminar)

Program: B.Sc in Graphics and Web Designing	**L**: 0 **T**: 0 **P**: 1
Branch: Computer Applications	**Credits:** 1
Semester: 1st	**Contact hours:**
Internal max. marks: 25	**Theory/Practical:** Practical
External max. marks:0	**Duration of end semester exam (ESE):** 3hrs
Total marks: 25	**Elective status:**Ability Enhancement

One each seminar will be organized on Drug De-addiction and Traffic Rules. Eminent scholar and experts of the subject will be called for the Seminar at least once during the semester. It will be binding for all the students to attend the seminar.

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B.Sc. Graphics & Web Designing
Course Outcome 3 Years- 6 Semesters

I. K.Gujral Punjab Technical University
B.Sc. (Graphics and Web Designing)

Course Code: UGCA1907
Course Name: Fundamentals of Statistics

Program: B.Sc in Graphics and Web Designing	**L: 3 T: 1 P: 0**
Branch: Computer Applications	**Credits:** 4
Semester: 2nd	**Contact hours:** 44 hours
Internal max. marks: 40	**Theory/Practical:** Theory
External max. marks: 60	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status:** Core

Prerequisite: Students must have the basic knowledge of mathematic terms.
Co requisite: NA
Additional material required in ESE: Minimum two exercises of each concept will be recorded in the file and the file will be submitted in End Semester Examinations.
Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	Understand the science of studying & analyzing numbers.
CO2	Identify and use various visualization tools for representing data.
CO3	Describe various statistical formulas.
CO4	Compute various statistical measures.

Course Code: UGWD1903
Course Name: Concepts of Website designing and development

Program: B.Sc in Graphics and Web Designing	**L**:3 **T**:1 **P**:0
Branch: Computer Applications	**Credits:** 4
Semester:2nd	**Contact hours:**44 hours
Theory/Practical: Theory	**Duration of end semester exam (ESE):**3hrs
Internal max. marks: 40	**Elective status:** Core
External max. marks:60	
Total marks:100	

Prerequisite: Basics of HTML and WWW
Co requisite: -NA-
Additional material required in ESE: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	Know about the basic functioning of WWW and websites
CO2	Learn various WWW concepts
CO3	Learn the concepts of web designing
CO4	Learn how to host websites

I. K.Gujral Punjab Technical University
B.Sc. Graphics & Web Designing
Course Outcome 3 Years- 6 Semesters

Course Code: UGCA1909
Course Name: Object Oriented Programming using C++

Program:B.Sc in Graphics and Web Designing	**L**:3 **T**:1 **P**:0
Branch: Computer Applications	**Credits:** 4
Semester:2nd	**Contact hours:** 44 hours
Internal max. marks: 40	**Theory/Practical:** Theory
External max. marks:60	**Duration of end semester exam (ESE):** 3hrs
Total marks:100	**Elective status:** Core

Prerequisite: -NA-
Co requisite: -NA-
Additional material required in ESE: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	To learn programming from real world examples.
CO2	To understand Object oriented approach for finding Solutions to various problems with the help of C++ language.
CO3	To create computer based solutions to various real-world problems using C++
CO4	To learn various concepts of object oriented approach towards problem solving

Course Code: UGCA1910
Course Name: Object Oriented Programming using C++ Laboratory

Program:B.Sc in Graphics and Web Designing	**L**:0 **T**:0 **P**:4
Branch: Computer Applications	**Credits:** 2
Semester: 2nd	**Contact hours:** 4 Hours per week
Internal max. marks: 60	**Theory/Practical:** Practical
External max. marks: 40	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status:** Core

Prerequisite: -NA-
Co requisite: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	To learn programming from real world examples.
CO2	To understand Object oriented approach for finding Solutions to various problems with the help of C++ language.
CO3	To create computer based solutions to various real-world problems using C++
CO4	To learn various concepts of object oriented approach towards problem solving

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B.Sc. Graphics & Web Designing
Course Outcome 3 Years- 6 Semesters

Course Code: UGCA1911
Course Name: Fundamentals of Statistics Laboratory

Program: B.Sc in Graphics and Web Designing	**L**: 0 **T**: 0 **P**: 4
Branch: Computer Applications	**Credits**: 2
Semester: 2nd	**Contact hours:** 4 Hours per week
Internal max. marks: 60	**Theory/Practical:** Practical
External max. marks: 40	**Duration of end semester exam (ESE):** 3hrs
Total marks: 100	**Elective status:** Core

Prerequisite: Students must have the knowledge of Spreadsheet.
Co requisite: The students will develop analytical behavior & will have better understanding of analyzing data and testing hypotheses.
Additional material required in ESE: Minimum two exercises of each concept will be recorded in the file and the file will be submitted in End Semester Examinations.

Course Outcomes: After studying this course, students will be able to:

CO#	Course Outcomes
CO1	Represent data using various Frequency table and Graphs.
CO2	Apply various operations/ formulas using any software/package to solve statistical problems.

Course Code: UGWD1904
Course Name: Workshop on Digital Image Editing

Program: B.Sc in Graphics and Web Designing	**L**:0 **T**:0 **P**:4
Branch: Computer Applications	**Credits**: 2
Semester: 2nd	**Contact hours:** 4 Hours per week
Theory/Practical: Practical	**Percentage of numerical/design problems: --**
Internal max. marks: 60	**Duration of end semester exam (ESE):** 3hrs
External max. marks: 40	**Elective status:** Core
Total marks: 100	

Prerequisite: -NA-
Co requisite: -NA-
Additional material required in ESE: -NA-

Course Outcomes: After studying this course, students will be able to:

CO#	Course outcomes
CO1	The students will be able to learn photo editing
CO2	The students will understand the function of Photoshop
CO3	The students will understand various types of photo editing tasks

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Course Outcome 3 Years- 6 Semesters

Ability Enhancement Compulsory Course
EVS102-18 Environmental Studies

Program: BCA	**L: 2 T: 0 P: 0**
Branch: Computer Applications	**Credits: 2**
Semester: 2nd	**Contact hours: --**
Theory/Practical: Theory	**Percentage of numerical/design problems: --**
Internal max. marks: 40	**Duration of end semester exam (ESE): --**
External max. marks: 60	**Elective status: Core**
Total marks: 100	

Course Outcomes:

1. Students will enable to understand environmental problems at local and national level through literature and general awareness.

2. The students will gain practical knowledge by visiting wildlife areas, environmental institutes and various personalities who have done practical work on various environmental Issues.

3. The students will apply interdisciplinary approach to understand key environmental issues and critically analyze them to explore the possibilities to mitigate these problems.

4. Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world