GOVERNMENT MILLENNIUM POLYTECHNIC, CHAMBA

DEPARTMENT OF APPLIED SCIENCES & HUMANITIES

SUBJECT : MATHEMATICS - I

Lesson Plan

SESSION : Aug-Dec 2024

LECT. NO.	NAME OF THE CHAPTER	CONTENT TO BE TAUGHT	LEARNING OBJECTIVES
1	Trigonometry	Introduction and discussion on the contents of the syllabus and distribution of marks etc.	The students are expected to acquire necessary background in Trigonometry to appreciate the importance of the geometric study as well as for the calculation and the mathematical analysis
2		Concept of angles, measurement of angles in degrees, grades and radians and their conversions	
3		Question based on conversion of angle from one system of measurement unit of angle to other.	
4		DCS	
5		DCS	
6		T-Ratios of Allied angles (without proof)	
7		Questions based on T-Ratios of Allied angles.	
8		Sum, difference formulae and their applications (without proof).	
9		DCS	
10		DCS	
11		Questions based on Sum, difference formulae and their applications .	
12		Product formulae (Transformation of product to sum, difference and vice versa).	
13		Questions based on Product formulae (Transformation of product to sum, difference and vice versa).	
14		DCS	
15		DCS	
16		T- Ratios of multiple angles, sub-multiple angles (2A, 3A, A/2).	
17		Questions based on T- Ratios of multiple angles, sub-multiple angles (2A, 3A, A/2).	
18		Graphs of sin x, cosx	
19		DCS	
20		DCS	
21		Class Test-I	
22	Differential Calculus	Definition of function	The students are expected to learn the ability to find the effects of changing conditions on a system.
23		Concept of limits	
24		Questions on Function and Limit	
25		DCS	
26		DCS	
27		Standard limits $\lim_{x\to a}\frac{x^n-a^n}{x-a}$, $\lim_{x\to 0}\frac{\sin x}{x}$	
28		Standard limits $\lim_{x\to 0}(1+x)^{1/x}$, $\lim_{x\to 0}\frac{a^x-1}{x}$	
29		Questions on Four Standard Limits	
30		DCS	
31		DCS	
32		Definition of Differentiation	
33		Differentiation of x^n, $\sin x$, $\cos x$, $\tan x$ and e^x, by Definition	
34		Differentiation of other Trigonometric functions by Definition	
35		DCS	
36		DCS	

37	Differential Calculus	Differentiation of sum, product of functions	The students are expected to learn the ability to find the effects of changing conditions on a system.
38		Differentiation of quotient of functions.	
39		Questions on Differentiation of sum, product and quotient of functions.	
40		DCS	
41		DCS	
42		Differentiation of function of a function.	
43		Differentiation of trigonometric function	
44		Differentiation of Inverse trigonometric functions	
45		DCS	
46		DCS	
47		Logarithmic differentiation.	
48		Miscelleneous questions on Diferentiation	
49		Miscelleneous questions on Diferentiation	
50		Class Test-II	
51	Algebra	Complex Numbers: Definition, real and imaginary parts of a Complex number	The students are expected to learn (i) Complex numbers enter into studies of physical phenomena in ways that most people cannot imagine. (ii) The partial fraction decomposition lies in the fact that it provides an algorithm for computing the anti derivative of a rational function.
52		Polar and Cartesian, representation of a complex number and its conversion from one form to other	
53		conjugate of a complex number, modulus and amplitude of a complex number	
54		DCS	
55		DCS	
56		Addition, Subtraction, Multiplication and Division of a complex number.	
57		De-movier's theorem, its application	
58		Partial fractions: Definition of polynomial fraction proper & improper fractions and definition of partial fractions.	
59		DCS	
60		DCS	
61		To resolve proper fraction into partial fraction with denominator containing non-repeated linear factors, repeated linear factors.	
62		Permutations and Combinations: Value of nPr and nCr	
63		Binomial theorem: Binomial theorem (without proof) for positive integral index (expansion and general form);	
64		DCS	
65		DCS	
66		binomial theorem for any index (expansion without proof) first and second binomial approximation with applications to engineering problems.	
67		Miscelleneous questions on Binomial Theorem	
68		Miscelleneous questions on Binomial Theorem	
69		DCS	
70		DCS	

Amandeep

Signature Of Teacher

(Amandeep)

Signature Of HOD
Applied Sciences

Applied Sciences Department

Applied Physics-I Subject plan for the Session 2024-2025 for 1st semester

Sr. No.	Topic	Time(Hrs)	Remarks
	Unit-1 : Physical World,Units and Measurements (10 hrs) 15 marks		
1	Physical quantities Units - fundamental and derived units, systems of units (FPS, CGS and SI units)	1	
2	Dimensions and dimensional formulae of physical quantities	2	
3	DCS	1	
4	Principle of homogeneity of dimensions	3	
5	Dimensional equations and their applications, conversion from one system of units to other,		
6	checking of dimensional equations and derivation of simple equations.		
7	DCS	1	
8	Limitations of dimensional analysis	2	
9	Error in measurement, absolute error, relative error, rules for representing significant figures in calculation.		
	Unit-2 : Force and Motion(12 hrs) 20 marks		
10	Scalar and vector quantities – examples, representation of vector, types of vectors	1	
11	DCS	1	
12	Addition and Subtraction of Vectors, Triangle and Parallelogram law (Statement only), Scalar and Vector Product.	2	
13	Resolution of Vectors and its application to lawn roller.	1	
14	DCS	2	
15	Impulse and its Applications	1	
16	Circular motion, definition of angular displacement, angular velocity, angular acceleration, frequency, time period.		
17	Relation between linear and angular velocity, linear acceleration and angular acceleration (related numerical)	2	
18	Expression and Applications of Centripetal and centrifugal forces with examples such as banking of roads and bending of cyclist		
19	DCS	2	
	Unit-3 : Work, Power and Energy (10 Hrs) 15 Marks		
20	Work: and its units, examples of zero work, positive work and negative work	1	
21	Friction: modern concept, types, laws of limiting friction, Coefficient of friction and its Engineering Applications.	2	
22	DCS	1	
23	Work done in moving an object on horizontal and inclined plane for rough and plane surfaces with its applications	2	
24	Energy and its units: Kinetic energy and gravitational potential energy with examples and their derivation		
25	Principle of conservation of mechanical energy for freely falling bodies, examples of transformation of energy.	2	
26	DCS	1	
27	Power and its units, calculation of power in numerical problems	1	

	Unit-4 : Rotational Motion (10 Hrs) 15 Marks	
28	Concept of translatory and rotatory motions with examples , Definition of torque and angular momentum and their examples	2
29	DCS	1
30	Conservation of angular momentum (quantitative) and its examples	2
31	Moment of inertia and its physical significance, radius of gyration for rigid body,	2
32	DCS	1
33	Theorems of parallel and perpendicular axes (statements only), Moment of inertia of rod, disc and ring (Formulae only no derivation).	2
	Unit-5 : Properties of Matter (12 Hrs) 20 Marks	
34	Elasticity: definition of stress and strain, different types of modulii of elasticity, Hooke's law, significance of stress strain curve	2
35	DCS	2
36	Pressure: definition, its units, atmospheric pressure, gauge pressure, absolute pressure, Fortin's Barometer and its applications	2
37	Surface tension: concept, its units, angle of contact, Ascent Formula (No derivation),	2
38	DCS	2
39	applications of surface tension, effect of temperature and impurity on surface tension	2
	Unit-6 : Thermometry (10 Hrs) 15 Marks	
40	Difference between heat and temperature	2
41	Modes of transfer of heat (Conduction, convection and radiation with examples)	1
42	DCS	1
43	Different scales of temperature and their relationship	2
44	Types of Thermometer (Mercury Thermometer, Bimetallic Thermometer, Platinum resistance Thermometer, Pyrometer)	1
45	Expansion of solids, liquids and gases, coefficient of linear, surface and cubical expansions and relation amongst them	1
46	DCS	1
47	Concept of Co-efficient of thermal conductivity	1

Signature of Teacher(Nemjel Choudhary)

Signature of H.O.D/O.C

Applied Science 1st Semester

Applied Chemistry plan for the Session August-December 2024

Lecture NO	Topic NO
	Unit-1 : Atomic Structure (08 hrs) 12 marks
1	Fundamental particles of atoms : Electron, proton, neutron (Definitions), Atomic Structure: Bohr's theory, successes and limitations
2	Hydroen spectrum explanation based on Bohr's model of atom, Heisenberg's Uncertainity principle
3	Quantum numbers – orbital concept
4	DCS
5	Shapes of s, p orbitals , difference between orbit and orbital
6	Pauli's exclusion principle, Hund's rule of maximum multiplicity, Aufbau rule
7	Electronic Configuration (z =1 to 30)
8	DCS
	Unit-2 : Chemical bonding and Solutions (8 hrs) 12 marks
9	Concept of chemical bonding – cause of chemical bonding, types of bonds: ionic bonding (NaCl example)
10	Lewis concept of covalent bond (H2, F2, HF), Electronegativity,
11	Difference between sigma and pie bond,
12	DCS
13	Electron sea model of metallic bond
14	Idea of solute, solvent and solution
15	Methods to express the concentration of solution- molarity (M = mole per liter), molality,mass percentage
16	DCS
	Unit:-3 Electro Chemistry and Corrosion (11 hrs) 17 marks
17	Electronic concept of oxidation, reduction and redox reactions, Definition of terms: electrolytes, non-electrolytes with suitable examples
18	Faradays laws of electrolysis and simple numerical problems. Industrial application of Electrolysis , Electrometallurgy
19	Industrial application of Electrolysis:- Electroplating, Electrolytic refining.
20	DCS
21	Application of redox reactions in electrochemical cells Primary cells – dry cell, Secondary cell - commercially used lead acid storage battery
22	Introduction to Corrosion of metals – definition, types of corrosion (electrochemical),
23	H2 liberation and O2 absorption absorption, mechanism of electrochemical corrosion
24	DCS
25	Internal corrosion preventive measures – Purification, alloying
26	heat treatment, External corrosion preventive measures
27	metal (anodic, cathodic) coatings.

	Unit 7 Lubrication (8 hrs) 12 marks
53	Function and characteristic properties of good lubricant,
54	classification with examples
55	DCS
56	Lubrication mechanism – hydrodynamic
57	Lubrication mechanism –boundary lubrication
58	Physical properties (viscosity and viscosity index, oiliness, flash and fire point, cloud and pour point only
59	DCS
60	chemical properties:- coke number, total acid number, saponification value of lubricant
	Unit -8 Polymers (4 hrs) 9 marks
61	Monomer, homo and co polymers , degree of polymerization
62	simple reactions involved in preparation and their application of thermoplastics and thermosetting plastics
	using Polythene, PVC, PS, PTFE, nylon-6,6 and Bakelite only
63	DCS
64	Vulcanization of rubber and properties of vulcanised rubber.

Sinature of Teacher
(Abhishek Vohra)

Signature of H.O.D/O.I.C
(Nemjel Choudhary)

	Deptt.:Applied Sciences & Humanities
	Subject: Communication Skills in English (HS101)
	Course Objectives: **1) To develop confidence in speaking english with correct pronunciation.** **2) To develop communication skills of students i.e. Listening, speaking, reading and writing skills.** **3) To develop certain qualities which will aid students in handling personal and career challenges, leadership skills etc.**
Lect.No	**Topic Number**
	Unit- 1 Communication: Theory and Practice(11 hrs.)
	1. Basics of communication:
1	Introduction , Meaning and Defination
2	Process of Communication.
3	DCS
	2. Types of communication:
4	Formal and informal, verbal-non verbal and Written
5	Barriers to effective communication.
6	DCS
	3. 7Cs for effective communication
7	considerate, concrete, concise, clear,complete,correct,corteous.
	4. Art of effective communication:
8	A) Choosing words, B) Voice, C) Modulation, D) Clarity, E) Time, F) Simplification of Words
9	D) Clarity, E) Time, F) Simplification of Words
10	DCS
	5.Technical Communication
11	Technical Communication
	Unit-2 .Soft Skills for ProfessionalExcellence(7 hrs.)
	Introduction:
12	Soft Skills and Hard Skills, Importance of Soft skills
13	DCS
	Life Skills:
14	Self -awareness and Self-analysis, adaptability., resilience
15	emotional intelligence and empathy etc.
16	DCS
17	Applying soft skills across cultures
18	DCS

	Unit 3: Reading Comprehension(13 hrs.)
	Section -1 Short Stories
19	1.The gift of Magi by O. Henry
20	The gift of Magi by O. Henry
21	DCS
22	2.Uncle Podger Hang a Picture by Jerome K. Jerome
23	Uncle Podger Hang a Picture by Jerome K. Jerome
24	DCS
	Section -2 Poetey
25	1. Night of the scorpion by Nissim Ezekiel
26	Night of the scorpion by Nissim Ezekiel
27	DCS
28	2. Stopping by Woods on a Snowy Evening
29	3. Where the Mind is Without Fear
30	Where the Mind is Without Fear
31	DCS
	Unit 4 .Professional Writting(8 hrs.)
32	**1.The art of precis writing**
33	1.The art of precis writing
	2. Letters
34	Business Letters
35	Personal Letters
36	DCS
	3. Drafting
37	email, notices
38	minutes of meeting etc.
39	DCS
	Unit 5. Vocabulary and Grammar(9 hrs.)
40	1. Glossary of administrative Terms
41	2.One word substitution
42	DCS
43	Idioms ,Phrases.
44	3.Part of speech
45	DCS
46	tenses,active passive voice
47	Punctution.
48	DCS

Signature of Teacher

Signature of HOD/OIC

Semester - I

ES102 (Introduction to IT Systems)

Subject plan for the Session August - December 2024

Lecture No.	Topic
	UNIT 1: Basics of Computer System **(7hrs.)**
1	Block Diagram of Computer System
2	General Understanding of various hardware components- CPU
3	Memory
4	Display Devices (CRT and LCD Monitors)
5	Keyboard
6	Mouse
7	HDD
	UNIT 2: Software Concepts **(5hrs.)**
8	Software and its types
9	Operating System
10	Types of Operating System
11	Functions of Operating System
12	Booting the system (Cold and warm)
	UNIT 3: Internet Skills **(7hrs.)**
13	Understanding the terminology of internet-web browser
14	Search Engine
15	World Wide Web(WWW)
16	Types of Networks
17	Awareness about the government portals (state portals)
18	Awareness about the government portals (national portals)
19	Awareness about institute portals
	UNIT 4: Working with MS- Word **(5hrs.)**
20	File Management (Creating new document, saving a document)
21	Printing a document
22	Editing a document, use of Home ribbon.
23	Use of Insert ribbon
24	Use of Design Layout ribbon
	UNIT 5: Working with MS- Excel **(5hrs.)**
25	Working with spread sheets, entering data into the cells
26	Merging cells, Formula bar
27	Usage of simple functions such as sum, average, min, max
28	Usage of simple functions such as percentage, round, floor, ceiling
29	Conditional formatting of cells
	UNIT 6: Information Security **(3hrs.)**
30	Concept of online frauds
31	Threats of online crime
32	Virus attacks and use of antivirus

Vikas

Signature of Teacher

Signature of HOD/OIC

Lesson Plan

Name of the Faculty : Sh. Omkar singh

Semester : 1st (N-22 Scheme)

Subject : Engineering Workshop Practice Carpentry

Duration : 14 Weeks

Work load per week : 03Hrs Practical. + 03 Hrs DCS

Week	Group of the Discipline	Practical Topic
1st	Group-1	Demonstration of different wood working tools
	Group-2	
	Group-3	
2nd	Group-4	
	Group-5	
	Group-1	Demonstration of differentwood working machines
3rd	Group-2	
	Group-3	
	Group-4	
4th	Group-5	
	Group-1	Demonstration of different wood working processes planing
	Group-2	
5th	Group-3	
	Group-4	
	Group-5	
6th	Group-1	Demonstration of different wood working process marking
	Group-2	
	Group-3	
7th	Group-4	
	Group-5	
	Group-1	Demonstration of different wood working processes Turning of wood
8th	Group-2	
	Group-3	
	Group-4	
9th	Group-5	
	Group-1	Job Practice on wood Half Lap
	Group-2	
10th	Group-3	

10th	Group-4	Job Practice on wood Half Lap
	Group-5	
11th	Group-1	Making of Job by Students by use of above Techniques
	Group-2	
	Group-3	
12th	Group-4	
	Group-5	
	Group-1	Making of Job by Students by use of above Techniques
13th	Group-2	
	Group-3	
	Group-4	
14th	Group-5	
	Group-1	Making of Job by Students by use of above Techniques
	Group-2	

Sh.Omkar singh

W/S Instructor Carpentry

Lesson Plan

Name of the Faculty : Sh. Neel singh

Semester : 1st (N-22 Scheme)

Subject : Engineering Workshop Practice welding

Duration : 14 Weeks

Work load per week : 03Hrs Practical. + 03 Hrs DCS

Week	Group of the Discipline	Practical Topic
1st	Group-3	Demonstration of different Welding Tools
	Group-4	
	Group-5	
2nd	Group-1	
	Group-2	
	Group-3	Demonstration of different Welding Machines
3rd	Group-4	
	Group-5	
	Group-1	
4th	Group-2	
	Group-3	Demonstration on Arc Welding
	Group-4	
5th	Group-5	
	Group-1	
	Group-2	
6th	Group-3	Demonstration on Gas Welding,
	Group-4	
	Group-5	
7th	Group-1	
	Group-2	
	Group-3	Demonstration on MIG Welding
8th	Group-4	
	Group-5	
	Group-1	
9th	Group-2	
	Group-3	Demonstration on MAG Welding
	Group-4	
10th	Group-5	

10th	Group-1	Demonstration on MAG Welding
	Group-2	
11th	Group-3	Job Practice of Gas cutting and rebuilding broken parts with welding
	Group-4	
	Group-5	
12th	Group-1	
	Group-2	
	Group-3	Jab Practice of making Lap Joint and Butt Joint
13th	Group-4	
	Group-5	
	Group-1	
14th	Group-2	
	Group-3	Making of Job by Students by use of above Techniques
	Group-4	

Sh.Neel singh

W/S Instructor Welding

Lesson Plan

Name of the Faculty : Sh. Vijay kumar

Semester : 1st (N-22 Scheme)

Subject : Engineering Workshop Practice Fitting

Duration : 14 Weeks

Work load per week : 03Hrs Practical. + 03 Hrs DCS

Week	Group of the Discipline	Practical Topic
1st	Group-2	Demonstration of different Fitting Tools
	Group-3	
	Group-4	
2nd	Group-5	
	Group-1	
	Group-2	Demonstration of different Drilling machines and power tools
3rd	Group-3	
	Group-4	
	Group-5	
4th	Group-1	
	Group-2	Demonstration of operations cutting and sawing
	Group-3	
5th	Group-4	
	Group-5	
	Group-1	
6th	Group-2	Demonstration of operations chipping and filling
	Group-3	
	Group-4	
7th	Group-5	
	Group-1	
	Group-2	Demonstration of operations Drilling and Tapping on mild steel workpiece
8th	Group-3	
	Group-4	
	Group-5	
9th	Group-1	
	Group-2	Job Practice (cutting of mild steel workpiece)
	Group-3	
10th	Group-4	

10th	Group-5	Job Practice (cutting of mild steel workpiece)
	Group-1	
11th	Group-2	Job Practice (chipping and filing of mild steel workpiece Drilling on mild steel workpiece)
	Group-3	
	Group-4	
12th	Group-5	
	Group-1	
	Group-2	Job Practice (Tapping on mild steel workpiece)
13th	Group-3	
	Group-4	
	Group-5	
14th	Group-1	
	Group-2	Job Practice (Tapping on mild steel workpiece)
	Group-3	

Sh. Vijay kumar

W/S Instructor Fitting

NAME AJAY SHARMA

SEMESTER – 1st (NEP-22 Scheme) (2024-2025)

Subject :– WORKSHOP PRACTICE SHEET METAL

DURATION – 14 WEEKS

WORK LOAD – 3 hrs Practical + 3 hrs DC/S week.

WEEK	GROUP	PRACTICAL TOPIC
1st	I, II, III	Demostration of Different sheet Metal Tool/Machines
2nd	IV, V	Demostration of Different Sheet Metal Tool/Machines
3rd	I II III	Demostraction of Different Sheet Metal operation
4th	IV V	Demostraction of Different Sheet Metal operation
5th	I, II, III	Sheet Cutting Practice with Hand tools
6th	IV, V	Sheet Cutting Practice with Hand tools
7th	I, II, III	Demostration of Different sheet metal work Hand tools
8th	IV, V	Demostraction of Different Sheet Metal work Hand tools
9th	I, II, III.	one simple job involving sheet Metal operations
10th	IV, V	One Simple job involving sheet Metal operations
11th	I, II III.	Soldering Practice on simple job
12th	IV, V	Soldering Practice on Simple job.
13th	I, II, III.	Brazing Practice on Simple Sheet.
14th.	IV V	Brazing Practice on Simple Sheet.

Ajay Sharma
Ajay Sharma
WSI Sheet Metal
G.M.P Chamba.

OIC

Lesson Plan

Name of the Faculty : Sh. Abinash thakur

Semester : 1st (N-22 Scheme)

Subject : Engineering Workshop Practice Carpentry

Duration : 14 Weeks

Work load per week : 03Hrs Practical + 03 Hrs DCS

Week	Group of the Discipline	Practical Topic
1st	Group-5	One lamp controlled by one switch
	Group-1	
	Group-2	
2nd	Group-3	
	Group-4	
	Group-1	Lamp circuit connection of lamp and socket by separate switches
3rd	Group-2	
	Group-3	
	Group-4	
4th	Group-5	
	Group-2	Connection of tube light
	Group-3	
5th	Group-4	
	Group-5	
	Group-1	
6th	Group-3	Simple lamp install bedroom lighting
	Group-4	
	Group-5	
7th	Group-1	
	Group-2	
	Group-4	Simple lamp circuit install stair case wiring
8th	Group-5	
	Group-1	
	Group-2	
9th	Group-3	
	Group-5	Demonstration of measurement of current ,voltage,power and energy and Demonstration of tools used in electrical wiring
	Group-1	
10th	Group-2	

10th	Group-3	Demonstration of measurement of current ,voltage,power and energy and Demonstration of tools used in electrical wiring
	Group-4	
11th	Group-1	Demonstration of advance power tools
	Group-2	
	Group-3	
12th	Group-4	
	Group-5	
	Group-2	Demonstration of pneumatic tools and accessories
13th	Group-3	
	Group-4	
	Group-5	
14th	Group-1	
	Group-3	Tools for cutting and drilling
	Group-4	

Sh. Abinash thakur

W/S Instructor Electrical

GOVERNMENT MILLENNIUM POLYTECHNIC, CHAMBA

DEPARTMENT OF APPLIED SCIENCES & HUMANITIES

SUBJECT : Sports & Yoga

Lesson Plan

SESSION : Aug-Dec 2024

LECT. NO.	NAME OF THE CHAPTER	CONTENT TO BE TAUGHT	LEARNING OBJECTIVES
1	Introduction to Physical Education	Introduction to syllabus , Meaning & definition of Physical Education	The students will be able to learn about physical Education and its importance in our life.
2		Aims & Objectives of Physical Education.	
3		Changing trends in Physical Education.	
4	Olympic Movement	Ancient & Modern Olympics (Summer & Winter.)	The students will get to know about different sports events and award related to different sports event .
5		Olympic Symbols, Ideals, Objectives & Values.	
6		Awards and Honours in the field of Sports in India (Dronacharya Award, Arjuna Award, Dhayanchand Award, Rajiv Gandhi Khel Ratna Award etc.).	
7	Physical Fitness, Wellness & Lifestyle	Meaning & Importance of Physical Fitness & Wellness. Components of Physical fitness. Components of Health related fitness. Components of wellness. Preventing Health Threats through Lifestyle Change. Concept of Positive Lifestyle.	Learn techniques for increasing concentration and decreasing anxiety which leads to stronger academic performance.
8	Fundamentals of Anatomy & Physiology in Physical Education, Sports and Yoga	Define Anatomy, Physiology & Its Importance. Effect of exercise on the functioning of Various Body Systems. (Circulatory System, Respi- ratory System, Neuro-Muscular System etc.).	Develop understanding of health-related fitness components: cardiorespiratory endur-ance, flexibility and body composition etc.
9	Kinesiology, Biomechanics & Sports	Meaning & Importance of Kinesiology & Biomechanics in Physical Edu. & Sports. Newton's Law of Motion & its application in sports. Friction and its effects in Sports.	Understand and correctly apply biomechanical and physiological principles related to exercise and training.
10	Postures	Meaning and Concept of Postures. Causes of Bad Posture. Advantages & disadvantages of weight training. Concept & advantages of Correct Posture. Common Postural Deformities – Knock Knee; Flat Foot; Round Shoulders; Lordosis, Ky- phosis, Bow Legs and Scoliosis. Corrective Measures for Postural Deformities	Understand basic skills associated with yoga and physical activities including strength and flexibility, balance and coordination.
11	Yoga	Meaning & Importance of Yoga. Elements of Yoga. Introduction - Asanas, Pranayama, Meditation & Yogic Kriyas	Assess yoga activities in terms of fitness value.
12		Yoga for concentration & related Asanas (Sukhasana; Tadasana; Padmasana & Sha-shankasana). Relaxation Techniques for improving concentration Yognidra.	
13	Yoga & Lifestyle	Asanas as preventive measures. Hypertension: Tadasana, Vajrasana, Pavan Muktasana, Ardha Chakrasana, Bhujangasana,Sharasana.	Improve personal fitness through participation in sports and yogic activities.
14		Obesity: Procedure, Benefits & contraindications for Vajrasana, Hastasana, Trikonasana, Ardh Matsyendrasana. Back Pain: Tadasana, Ardh Matsyendrasana, Vakrasana, Shalabhasana, Bhujangasana.	
15		Diabetes: Procedure, Benefits & contraindications for Bhujangasana, Paschimottasana, Pavan Muktasana, Ardh Matsyendrasana. Asthema: Procedure, Benefits & contraindications for Sukhasana, Chakrasana,Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana.	

16	Training and Planning in Sports	Meaning of Training. Warming up and limbering down. Skill, Technique & Style. Meaning and Objectives of Planning. Tournament – Knock-Out, League/Round Robin & Combination.	Demonstrate an understanding of sound nutritional practices as related to health and physical performance.Identify and apply injury prevention principles related to yoga and physical fitness activities.
17	Psychology & Sports	Definition & Importance of Psychology in Physical Edu. & Sports. Define & Differentiate Between Growth & Development. Adolescent Problems & Their Management.	(i) Practice Physical activities and Hatha Yoga focusing on yoga for strength, flexibility, andrelaxation. (ii) Learn techniques for increasing concentration and decreasing anxiety which leads to stronger academic performance.
18		Emotion: Concept, Type & Controlling of emotions. Meaning, Concept & Types of Aggressions in Sports. Psychological benefits of exercise.	
19		Anxiety & Fear and its effects on Sports Performance. Motivation, its type & techniques. Understanding Stress & Coping Strategies.	
20	Doping	Meaning and Concept of Doping. Prohibited Substances & Methods. Side Effects of Prohibited Substances	The students will get to know about different Doping Substances that are prohobited and their effects .
21	Sports Medicine	First Aid – Definition, Aims & Objectives. Sports injuries: Classification, Causes & Prevention. Management of Injuries: Soft Tissue Injuries and Bone & Joint Injuries.	The students will get to know about different Sports injuries, medicines and remedies .
22	Sports/ Games	Following sub topics related to any one Game/Sport of choice of student out of: Athletics, Badminton, Basketball, Chess, Cricket, Kabaddi, Lawn Tennis, Swimming, Table Tennis, Volleyball, Yoga etc.	The students can assess their current personal fitness levels by participating in different sports events.
23		History of the Game/Sport.	
24		Latest General Rules of the Game/Sport.	
25		Specifications of Play Fields and Related Sports Equipment.	
26		Important Tournaments and Venues.	
27		Sports Personalities.	
28		Proper Sports Gear and its Importance.	

Amandeep

Signature Of Teacher

(Amandeep)

Signature Of OIC
Applied Sciences