



Hemchandracharya North Gujarat University, Patan

PH.D. COURSE WORK SYLLABUS

SUBJECT : PHYSICAL EDUCATION

Scheme & Course

Sr.	Paper	Nomenclature	Credits	Marks
1.	Paper-I-PHY_EDU-CW-101	Research Methodology	04	70+30
2.	Paper-II-PHY_EDU-CW-102	Healtheducation and Sports Nurtition	04	70+30
3.	Paper-III-PHY_EDU-CW-103	Computer Applications to the subject	04	70+30
4.	Paper-IV-PHY_EDU-CW-104	Review of published research in the relevant field	04	70+30
5.	Paper-V-PHY_EDU-CW-105	Comprehensive Viva	04	100

Notes:

1. The candidate has to obtain a minimum of 55% of marks or its equivalent grade points in aggregate in the course work in order to be eligible to continue in the Ph.D. programme.
2. If candidate obtains 'F' or 'Ab.' grade in the course/ subject. He/ she will be treated to have failed in that course. He/ She has to reappear in the examination in the next semester.

Paper-I PHY_EDU-CW-101 Research Methodology Credit-4 (70+30)

- ⇒ Exercise physiology its scope and importance in the field of physical education and sports.
- ⇒ Cardio respiratory adaptations to long and short term physical activities.
- ⇒ Muscle-its types , characteristics and functions. Microscopic structure of muscle fibre. Sliding filament theory of muscular contraction. Types of muscle fibres and sports performance. Muscular adaptations to exercise.
- ⇒ Neuro-muscular junction and transmission of nerve impulse, kinesthetic Sense organs and neural control of motor skills.
- ⇒ Bio-chemical aspects of exercise - Metabolism of food products. Aerobic and anaerobic systems during rest and exercise. Direct and indirect methods of measuring energy cost of exercise.
- ⇒ Recovery process - Physiological aspects of fatigue. Restoration of energy stores. Recovery oxygen. Nutritional aspects of performance.
- ⇒ Environmental influence on human physiology under exercise.
- ⇒ Women in sports- trainability. Physiological gender differences and special problems of women athletes.
- ⇒ Aging - Physiological consequences, life style management and healthful aging.
- ⇒ Physiological responses of various therapeutic modalities and rehabilitation.
- ⇒ Physiological aspects of various Ergogenic aids. Massage manipulations and their physiological responses.

Paper-II PHY_EDU-CW-102 Healtheducation and Sportsnurtition Credit-4 (70+30)

- ⇒ Health- its objectives and spectrum. Health Education, its importance and principles. Role of genetics and environment in achieving health. Health-related physical fitness.
- ⇒ Community health programme- Health appraisal & health instructions. International and national health promoting government & private agencies.
- ⇒ School Health programme and personal hygiene.



Vc. Registrar
Hemchandracharya
North Gujarat University, Patan

- ⇒ Communicable diseases: causes, symptoms, prevention through other means and Immunization.
- ⇒ Psychosomatic disorders/ sedentary life style diseases: causes, symptoms and prevention.
- ⇒ Obesity related health problems. Body weight control and its significance on health. Role of exercise, dieting and combination of exercise & dieting on weight control.
- ⇒ First-aid- objectives and principles. First-aid for Shock, poisoning, burns, drowning, bleeding, electric shock and common sports injuries.
- ⇒ Pollution- Air, water, sound and radiation. Effects of pollution on health, Preventive and safety measures from pollution.
- ⇒ Nutrition- Balanced diet and its components. Nutritional Deficiencies. Understanding of malnutrition and nutritional supplements.
- ⇒ Effects of smoking, alcohol, & drugs on health; prevention and rehabilitation.

Paper-III PHY_EDU-CW-103 Computer Applications to the subject Credit-4 (70+30)

- UNIT-1 Introduction to Computer**
Basic Computer Organisation, Computer Peripherals , Types of software
- Unit-2 Introduction to DOS**
Booting process, Dos Funcatios and commands, File Management
- Unit-3 Introduction to Windows 7**
Knowing Windows, Windows 7, Icons & Desktop Properties
- Unit-4 Introduction to MS Work, Ms Excle, Power Point**
Word Processor, Ms Word starting & Editing, Formatting and printing of a document
Making Excle Files, Slide Preparation and Presentation
- Unit-5** Introduction to Internet, Internet Explorer,
Introduction to SPSS

Paper-IV PHY_EDU-CW-104 Review of published research in the relevant field Credit-4 (70+30)

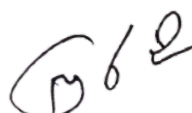
For this paper candidates will have to review literature in an area of research, prepare a research proposal and submit a report to the University at the end of the course work. The selection of the problem and preparation of the proposal will be in consultation with research guide.

Paper-V PHY_EDU-CW-105 Comprchensive viva voce Credit-4 (100)

Candidate will face a Comprehensive Viva-Voce of 4 credits on the subject of Research Methodology, Healtheducation and Sportsnurition and literature review report submitted to the university. The Presentation will have to be made by the candidate and it will need to be prepared in consultation with research guide.

=====+++++++=====




Vc. Registrar
Hemchandracharya
North Gujarat University, Patan