



SGT UNIVERSITY

VALUE ADDED COURSES



**Faculty of Physiotherapy
2024-25**



About the University

SGT University, established in 2013 and recognized by the University Grants Commission (UGC), has set its sights on fostering a culture of research, innovation, and interdisciplinary education. Nestled on a sprawling 70-acre campus on the outskirts of Gurgaon, the university boasts state-of-the-art resources and infrastructure designed to facilitate cutting-edge academic and research achievements.

Driven by a relentless pursuit of excellence, SGT University has earned the prestigious NAAC A+ accreditation, becoming one of the youngest institutions in the country to receive this honour. This recognition highlights the university's commitment to maintaining high standards in education and research.

Among its broad array of academic programs, the university offers premier medical courses through the SGT Medical College, Hospital & Research Institute, which are considered among the best in the nation. These programs are seamlessly integrated with practical training and research opportunities, ensuring that students receive a comprehensive, world-class education in the medical field.

Our Vision

To nurture individual's excellence through value based, cross-cultural, integrated and holistic education adopting the contemporary and advanced means blended with ethical values to contribute in building a peaceful and sustainable global civilization.

Our Mission

- To impart higher education at par with global standards that meets the changing needs of the society
- To provide access to quality education and to improve quality of life, both at individual and community levels with advancing knowledge in all fields through innovations and ethical research.
- To actively engage with and promote growth and welfare of the surrounding community through suitable extension and outreach activities
- To develop socially responsible citizens, fostering ethical values and compassion through participation in community engagement, extension and promotion activities.
- To create competitive and coordinated environment wherein the individual develops skills and a lifelong learning attitude to excel in their endeavours.

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INTRODUCTION

In the dynamic and ever-changing global landscape, the need for lateral thinking, innovation, and entrepreneurial spirit has never been greater. Traditional educational approaches that focus solely on specific skill sets often become outdated due to the rapid pace of technological advancements. As such, no university curriculum can comprehensively address all areas of importance or relevance. To ensure that students are better equipped to meet industry demands, it is crucial for higher education institutions to supplement the core curriculum, helping students develop both their aptitudes and interests.

Objectives:

The primary objectives of the Value-Added Course (VAC) are:

1. **To enhance industry understanding:** Equip students with knowledge of industry expectations and requirements.
2. **To improve employability:** Enhance students' employability skills, making them more competitive in the job market.
3. **To bridge skill gaps:** Address existing gaps in skills and ensure students are industry ready.
4. **To foster inter-disciplinary skills:** Provide students with opportunities to develop diverse skills across various disciplines.
5. **To encourage entrepreneurship:** Inspire students to become job creators rather than just job seekers.

Course Design

Departments designing Value-Added Courses should begin by conducting a **Training Need Analysis** and engaging with industry experts, alumni, and employers to identify skill gaps and emerging trends. This will guide the creation of a syllabus tailored to current demands.

Conduction of Value-Added Courses

- **Voluntary Participation:** VAC is not a mandatory requirement for completing any academic program, and the credits earned through these courses are additional to the degree's total credit requirement.
- **Learning Format:** VAC is an instructor-supported learning course, available to all students without any additional fee. Classes are typically scheduled during reserved time slots, beyond regular class hours, and may also be conducted on weekends or during vacations.
- **Course Registration:** Students may register for only one Value-Added Course per semester, preferably offered by their own department. However, with prior permission from the Dean, they can take courses from other departments.



- **Minimum Participants:** A minimum of 5 students must opt for a course for it to be offered.
- **Industry and Expert Involvement:** Eminent industry professionals or academicians may conduct VACs. This broadens students' exposure and enhances the learning experience.

Course Duration and Structure

- **Duration:** Each Value-Added Course should last at least 30 hours, with a balanced structure of 18 hours (60%) theory and 12 hours (40%) practical. The exact division of theory and practical hours will be determined by the course instructor with the approval of the Dean.
- **Location:** The courses will be conducted within the respective schools, with classrooms assigned by the Dean based on student numbers.

REGISTRATION PROCEDURE

1. **Course Listings:** A list of available Value-Added Courses, along with syllabi, will be posted on the university website.
2. **Registration Process:** Students must complete and submit a registration form to enroll in a course. The Department Head will group students based on their choices and send them to the Dean for final approval.
3. **Attendance and Assessment Records:** The course instructor is responsible for maintaining attendance and assessment records, including details on assignments, seminars, and other activities. These records must be signed by both the course instructor and the Department Head and kept for future reference.
4. **Attendance Requirements:** Students must maintain at least 75% attendance in the Value-Added Course to be eligible for a certificate. Up to a 10% relaxation in attendance may be granted for valid reasons, such as illness or extracurricular participation.

Certification

Upon successfully completing a Value-Added Course, students will be awarded a **certificate** signed by the authorized university signatories, recognizing their accomplishment in the course.

Course Code: VAC/FPHY/003

COURSE OBJECTIVES:

- To increase awareness of the need for and role of ergonomics in occupational health
- To obtain basic knowledge in the application of ergonomic principles to design of industrial workplaces and the prevention of occupational injuries
- To understand the breadth and scope of occupational ergonomics

COURSE CONTENT:

Module I: Introduction to Ergonomics and risk factors

- Introduction to Ergonomics, Definition and History of Ergonomics, Assessment of task, equipment evaluation, Observation of work site, identify various ergonomic risk factors, Explain WRMSD'S causes, prevention

Module II: Anthropometry and Workspace Design

- Anthropometry and Workspace Design Muscular work include dynamic and static work, nervous control of movement, skilled work and ways to improve work efficiency. Anthropometry is the study of the size and shape of the human body.
- Principles of workspace design, including seated work, standing work, work reaches and working heights, the office environment and visual work.

Module III: Work related to musculoskeletal disorders

- Explain Various Work-related musculoskeletal disorders, discuss in detail about causes and ergonomics specific to different professions- Physiotherapist, dentist, teacher, computer operator, housewife, farmers, driver.

Module IV: Health promotion focused on Workplace and Physical Activity

- Basic concepts in public health and health psychology. Theoretical knowledge how a health promotion work can be carried out in different levels in the society.
- Theoretical knowledge regarding health promotion works especially with physical working environment and physical activity within different fields and for different groups in society.
- Description of planning, implementation and evaluation in a health promotion project.



REFERENCES:

- Kroemer, K.H.E., Fitting the Human: Introduction to Ergonomics, CRC Press Recommended:
- Freivalds, A., Niebel's Methods, Standards and Work Design, McGraw Hill
- Kroemer, K.H.E., Fitting the Human: Introduction to Ergonomics, CRC Press Recommended:
Freivalds, A., Niebel's Methods, Standards and Work Design, McGraw Hill.



Preventive Women Health



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Course Code: VAC/FPHY/004

COURSE OBJECTIVES:

- To identify pertinent health issues in the field of women's health
- To understand the impact of social and cultural contexts on women
- To demonstrate skills to prevent and manage most common issues related to women's health

COURSE CONTENT:

Module I: Introduction to Anatomy, Physiology of Female Reproductive system

- Introduction: Importance of women's health in different life stages, Key health concerns affecting women globally, Social, cultural, and economic influences on women's health
- Reproductive Anatomy & Physiology: Basic understanding of the female reproductive system, Menstrual cycle and hormonal changes, Puberty, pregnancy, and menopause: key physiological changes

Module II: Issues related to women's health

- Menstrual Health: Common menstrual disorders (PCOS, endometriosis, dysmenorrhea), Managing menstrual pain and discomfort, Importance of menstrual hygiene and safe practices, Demonstration of menstrual hygiene products and their safe use, Safe sexual practices and reproductive health education, Family planning methods and contraceptive options, Addressing common misconceptions about sexual health

Module III: Women's Mental Health and Emotional Well-being

- Managing stress in women's health: Coping strategies for anxiety, depression, and stress, Mindfulness and relaxation techniques, Role of diet and nutrition in women's health, Importance of physical activity in different age groups, Common lifestyle-related health problems (osteoporosis, obesity), Demonstration of basic fitness exercises for women

Module IV: Community Awareness and Women's Health Advocacy

- Role of community in women's health: Strategies for improving women's health awareness in communities, Role of non-medical professionals in women's health education, how to support women facing health challenges

REFERENCES:

- Williams Obstetrics 25th Edition, Kenneth Leveno, Steven Bloom, Brian Casey, Jodi Dashe, McGraw Hill Education
- Women's Health in Physical Therapy: Principles and practices for Rehab Professionals, Jean M. Irion and Glenn L. Irion, Lippincott Williams and Wilkins; 1st Edition

HEALTHY AGEING



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Course Code: VAC/FPHY/005

COURSE OBJECTIVES:

- To understand the physiological and psychological changes associated with ageing.
- To identify key lifestyle factors that contribute to healthy ageing.
- To develop strategies for preventing common age-related conditions.
- To explore the role of physical activity, nutrition, and mental health in ageing well.

COURSE CONTENT:

Module I: Introduction to Healthy Ageing

- Definition, scope, and importance of healthy ageing.
- Theories of ageing: Biological, psychological, and social theories.
- Common misconceptions and myths about ageing.

Module II: Physiological and Psychological Aspects of Ageing

- Age-related changes in the cardiovascular, musculoskeletal, nervous, and endocrine systems.
- Cognitive ageing, memory, and neuroplasticity.
- Psychological resilience and mental well-being in older adults.

Module III: Lifestyle and Preventive Strategies

- Role of physical activity and exercise in healthy ageing.
- Nutrition and dietary recommendations for older adults.
- Disease prevention strategies: Osteoporosis, cardiovascular diseases, diabetes, and neurodegenerative disorders.

Module IV: Social and Environmental Factors in Healthy Ageing

- Importance of social engagement and community participation.
- Age-friendly environments and assistive technologies.
- Policies and programs for elderly care and health promotion.

REFERENCES:

- Aging, the Individual, and Society – Hillier & Barrow
- Physical Activity and Health in Older Adults – Bouchard, Blair & Haskell