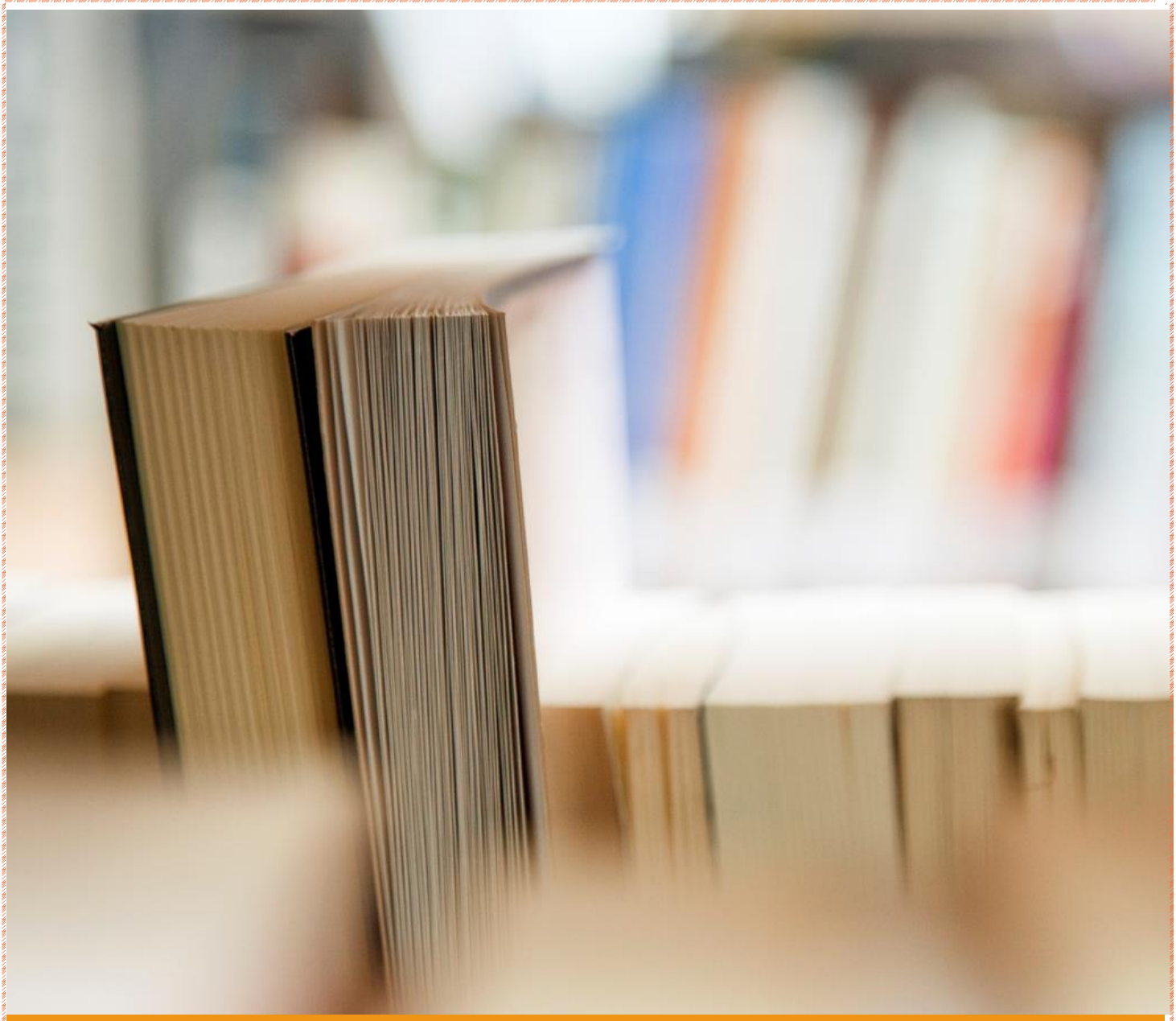

SGRR UNIVERSITY

Brochure of Value-Added Courses SGRRIM&HS School of Paramedical Sciences 2023-2024

ABOUT THE UNIVERSITY

Shri Guru Ram Rai University was established by a religious and philanthropic leader, Shri Mahant Devendra Dass Ji Maharaj in the year 2017. It is situated in the heart of city, Uttarakhand. We are extremely privileged to extend the values and ethos of the Shri Guru Ram Rai Education mission through SGRR University to impart quality education and in successfully placing more than 80% students in various companies across the globe. SGRR University has humongous campus spread over 80 acres of land. Its state-of-art facilities give opportunities to develop leadership skills and to achieve professional excellence. It has 8500+ students from different countries, 29 states and Union Territories and providing cultural melange and global exposure to our students. One of the biggest boosts from University is its unmatched experience of 67 years of in delivering quality education that helps to develop confidence and will give you more knowledge, industry exposure, building good networking and high self-esteem. This will change your overall personality and develop you into a complete professional to face any challenge.

Vision

"To establish Sri Guru Ram Rai University to be a Center of Excellence in higher education, innovation and social transformation by nurturing inquisitive and creative minds and by enabling the stakeholders to become committed professionals and educators of national and global relevance."

Mission

- To provide a comprehensive and sustainable educational experience that fosters the spirit of enquiry, scientific thinking and professional competence along with ethical and spiritual values
- To deliver a classic, well rounded learning experience that is distinctive and impactful on the young generation preparing them for a successful career
- To engage, inspire and challenge the stakeholders to become leaders with ethics and positive contributors to their chosen field and humane citizens
- To attract, train and retrain qualified staff to work efficiently to bring forth the maximum resource potential

- To develop committed and responsible professionals who work for the welfare of the society by providing innovative and efficient solutions and creating long term relationship with the stakeholders

- To create a sustainable career, by collaborating with stakeholders and participating in community partnership for life and livelihood in the local society in a responsive and dynamic way

- To make our students globally competent by introducing specialized training leading to professional capabilities and developing diverse skills in them for competitive advantage.

- To establish quality standards for generations by epitomising professionalism and integrity while raising the achievements of students.

- To ceaselessly pursue excellence by strengthening a learning environment that makes the institution the most preferred destination in the country.

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INTRODUCTION

The ever-changing global scenario makes the world more modest and needs high levels of lateral thinking and the spirit of entrepreneurship to cope up with the emergent challenges. Many a times, the defined skill sets that are being imparted to students today with Programme Specific Objectives in educational institutions become redundant sooner or later due to rapid technological advancements. No university curriculum can adequately cover all areas of importance or relevance. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes.

Objectives The main objectives of the Value-Added Course are:

- ✓ To provide students an understanding of the expectations of industry.
- ✓ To improve employability skills of students.
- ✓ To bridge the skill gaps and make students industry ready.
- ✓ To provide an opportunity to students to develop inter-disciplinary skills.
- ✓ To mould students as job providers rather than job seekers.

Course Designing The department interested in designing a Value Added Course should undertake Training Need Analysis, discuss with the generic employers, alumni and industrial experts to identify the gaps and emerging trends before designing the syllabus.

Conduction of value added courses :

Value Added Course is not mandatory to qualify for any programme and the credits earned through the Value-Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. It is a teacher assisted learning course open to all students without any additional fee.

Classes for a VAC are conducted during the RESERVED Time Slot in a week or beyond the regular class hours The value-added courses may be also conducted during weekends / vacation period. A student will be permitted to register only one Value Added Course in a Semester.

student will be encouraged to opt for the VAC offered by his/her parent Department/Faculty. Industry Experts / Eminent Academicians from other Institutes are eligible to offer the value-added course. The course can be offered only if there are at least 5 students opting for it. The students may be allowed to take value added courses offered by other departments after obtaining permission from Dean offering the course. The duration of value added course is 30 hours with a combination 18 hours (60%) of theory and 12 hours (40%) of practical. However, the combination of

theory and practical shall be decided by the course teacher with the approval of the Dean

GUIDELINES FOR CONDUCTING VALUE ADDED COURSES

- Value Added Course is not mandatory to qualify for any program.
- It is a instructor supported learning course open to all students without any added fee.
- Classes for VAC will be conducted during the **RESERVED** Time Slot in a week or beyond the regular class hours.
- The value-added courses may be also conducted during weekends / vacation period.
- A student will be permitted to register only one Value Added Course in a Semester.
- Students may be permitted to enrol in value-added courses offered by other departments/ Schools after obtaining permission from the Department's Head offering the course.

DURATION AND VENUE

- The duration of value-added course should not be less than 30 hours.
- The Dean of the respective School shall provide class room/s based on the number of students/batches.
- VAC shall be conducted in the respective School itself.

REGISTRATION PROCEDURE

The list of Value-Added Courses, along with the syllabus, will be available on the University Website. A student must register for a Value-Added Course offered during the semester by completing and submitting the registration form. The Department Head shall segregate according to the option chosen and send it to the Dean of the school offering the specific Value-Added Courses.

- Each faculty member in charge of a course is responsible for maintaining Attendance and Assessment Records for candidates who have registered for the course.
- The Record must include information about the students' attendance and Assignments, seminars, and other activities that were carried out.

- The record shall be signed by the Course Instructor and the Head of the Department at the end of the semester and kept in safe custody for future verification.

- Each student must have a minimum of 75% attendance in all courses for the semester in order to be eligible to take certificate.

- Attendance requirements may be relaxed by up to 10% for valid reasons such as illness, representing the University in extracurricular activities, and participation in NCC.

- The students who have successfully completed the Value Added Course shall be issued with a Certificate duly signed by the Authorized signatories.

Hospital Infection Control in Various Clinical Settings

Course Code: VCSPAMS15

Course Objectives:

- Understanding Infection Control
- Infection Prevention Strategies
- Managing Infectious Outbreaks
- Infection Control in Specific Departments
- Legal and Ethical Considerations in Infection Control

Course Outcome:

- Comprehensive understanding of infection control principles and practices in hospital settings.
- Ability to implement effective infection prevention strategies.
- Skills in managing infectious disease outbreaks in clinical environments.
- Knowledge of infection control in various clinical departments.
- Understanding of legal and ethical considerations in infection control.

Course Modules:

Module I: Foundational Principles of Infection Control

- Basics of microbiology and epidemiology in healthcare.
- Standard precautions and transmission-based precautions.

Module II : Infection Prevention Strategies

- Hand hygiene, sterilization techniques, and use of PPE.
- Environmental cleaning and disinfection practices.

Module III : Outbreak Management and Surveillance

- Identification, reporting, and management of infectious outbreaks.
- Surveillance systems and their role in infection control.

Module IV : Specialized Infection Control Practices

- Infection control in high-risk areas (e.g., operating rooms, intensive care units).
- Tailored strategies for vulnerable populations (e.g., immunocompromised patients).

Module V : Legal and Ethical Aspects of Infection Control

- Compliance with regulatory standards and guidelines.

- Ethical issues and patient education in infection control.

References :

- "Mayhall's Hospital Epidemiology and Infection Prevention" by C. Glen Mayhall
- "Practical Healthcare Epidemiology" by Ebbing Lautenbach et al.
- "Infection Control and Management of Hazardous Materials for the Dental Team" by Chris H. Miller
- "Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases" by John E. Bennett et al.

Advanced Clinical Assessment for Shoulder Issues

Course Code: VCSPAMS16

Course Objectives:

- Comprehensive Understanding:
- Advanced Clinical Assessment Techniques:
- Diagnostic Imaging and Interpretation:
- Differential Diagnosis:
- Treatment Planning and Rehabilitation

Course Outcome:

- A deep understanding of shoulder anatomy and biomechanics.
- Proficiency in advanced clinical assessment techniques for shoulder issues.
- Competence in interpreting diagnostic imaging related to the shoulder.
- Expertise in differential diagnosis of various shoulder conditions.
- Skills in formulating treatment plans and implementing rehabilitation strategies.

Course Modules:

Module I: Shoulder Anatomy and Biomechanics

- In-depth study of shoulder joint structures, muscles, and biomechanics.

Module II: Clinical Assessment Techniques

- Advanced techniques for assessing shoulder range of motion, strength, and stability.

Module III: Diagnostic Imaging in Shoulder Assessment

- Overview of radiographic, MRI, and ultrasound imaging for shoulder evaluation.
- Interpretation skills and correlation with clinical findings.

Module IV: Differential Diagnosis in Shoulder Issues

- Identification and differentiation of various shoulder conditions.
- Case-based learning for practical application.

Module V : Treatment Planning and Rehabilitation Strategies

- Formulation of effective treatment plans based on assessment findings.
- Rehabilitation exercises and strategies for different shoulder problems.

References :

- "Shoulder Pain? The Solution & Prevention: Fourth Edition" by John M. Kirsch
- "Physical Examination of the Shoulder: An Evidence-Based Approach" by Ryan J. Warth and Peter J. Millett
- "Shoulder Dystocia and Birth Injury: Prevention and Treatment" by James A. O'Leary
- "Rehabilitation of the Hand and Upper Extremity" by Terri M. Skirven et al.

Radiological Diagnosis with CT and MRI

Course Code: VCSPAMS17

Course Objectives:

- Understanding Imaging Modalities
- Interpretation Skills
- Clinical Correlation
- Advanced Imaging Techniques:
- Case Studies and Reporting:

Course Outcome:

- Proficiency in interpreting CT and MRI images for diagnostic purposes.
- Ability to correlate radiological findings with clinical presentations.
- Understanding the principles and applications of advanced imaging techniques.
- Competence in preparing comprehensive and accurate radiology reports.

Course Modules:

Module I: Principles and Basics of CT and MRI

- Introduction to the principles, physics, and technology behind CT and MRI.
- Understanding the differences and applications of each modality.

Module II : Image Interpretation Skills

- Training in interpreting normal and abnormal findings in CT and MRI scans.
- Identification of anatomical structures and pathological changes.

Module III : Clinical Correlation in Radiology

- Integration of radiological findings with clinical data.
- Case discussions for understanding the diagnostic impact of imaging.

Module IV : Advanced Imaging Techniques

- Exploration of contrast-enhanced studies in CT and MRI.
- In-depth study of various imaging sequences in MRI.

Module V : Case Studies and Reporting

- Analysis and interpretation of complex cases using CT and MRI images.

- Development of skills in preparing accurate and concise radiology reports.
- Duration: 5 hours.

References :

- "Primer of Diagnostic Imaging" by Mukesh G. Harisinghani and John W. Chen
- "Magnetic Resonance Imaging: Physical and Biological Principles" by Stewart C. Bushong
- "Computed Tomography: Physical Principles, Clinical Applications, and Quality Control" by Euclid Seeram
- "Radiologic Science for Technologists: Physics, Biology, and Protection" by Stewart C. Bushong

Protocols for Clinical Laboratory Security

Course Code: VCSPAMS18

Course Objectives:

- Gain knowledge about the importance of security in clinical laboratories.
- Formulate effective security protocols for safeguarding laboratory personnel, samples, and data.
- Establish measures for preventing unauthorized access and ensuring confidentiality.
- Implement safety measures to prevent accidental exposure or release.
- Understand the significance of data security in clinical laboratories.
- Conduct drills and training sessions to ensure preparedness among laboratory staff.

Course Outcome:

- Development of comprehensive security protocols for clinical laboratories.
- Enhanced awareness of potential threats and risks in laboratory settings.
- Improved handling of biological hazards and implementation of safety measures.
- Strengthened data security and confidentiality practices.
- Increased preparedness and effective response to emergencies.

Course Modules:

Module I: Introduction to Laboratory Security

- Overview of the importance of security in clinical laboratories.
- Identification of potential security threats and risks.

Module II : Security Protocols and Access Control

- Development of effective security protocols for laboratory settings.
- Implementation of access control measures.

Module III : Biological Hazard Management

- Protocols for handling and securing biological materials.
- Safety measures to prevent exposure and release.

Module IV : Data Security and Confidentiality

- Importance of data security in laboratory settings.
- Protocols for secure data storage, transmission, and disposal.

Module V : Emergency Preparedness and Response

- Protocols for responding to emergencies in the laboratory.
- Training and drills for laboratory staff.

References :

- "Laboratory Security and Emergency Response Guidance for Laboratories Working with Select Agents" by Centers for Disease Control and Prevention (CDC)
- "Biological Safety: Principles and Practices" by Diane O. Fleming and Zephaniah Dhlamini
- "Information Security Policies, Procedures, and Standards: Guidelines for Effective Information Security Management" by Thomas R. Peltier

Practical Ergonomics for Daily Activities

Course Code: VCSPAMS19

Course Objectives:

- Develop a foundational understanding of ergonomics and its relevance to daily activities.
- Apply ergonomic principles to various daily activities such as sitting, standing, lifting, and using electronic devices.
- Identify and rectify ergonomic challenges in common scenarios.
- Understand the ergonomic factors contributing to MSDs and their implications.
- Evaluate and implement adjustments for improved ergonomics in diverse settings.
- Communicate the importance of ergonomics for long-term health and productivity.

Course Outcome:

- Enhanced understanding of ergonomics and its practical application in daily life.
- Improved posture and body mechanics in various activities.
- Reduced risk of musculoskeletal disorders through proper ergonomics.
- Ability to design and optimize ergonomic workspaces.
- Increased awareness and advocacy for ergonomic practices.

Course Modules:

Module I: Introduction to Ergonomics

- Definition and significance of ergonomics.
- Impact of ergonomics on daily activities and health.

Module Ii : Ergonomics in Sitting and Standing

- Ergonomic principles for sitting and standing postures.
- Techniques to maintain optimal body alignment.

Module Iii : Ergonomics in Lifting and Carrying

- Safe lifting and carrying techniques to prevent strain.
- Importance of proper body mechanics in daily tasks.

Module IV : Ergonomics in Device Usage

- Ergonomic considerations for using computers, laptops, and mobile devices.
- Strategies to reduce the risk of repetitive strain injuries.

Module V : Creating Ergonomic Workspaces

- Designing ergonomic workstations at home and in the workplace.
- Practical adjustments for improved ergonomics.

References :

- "The Basics of Occupational Safety" by David L. Goetsch
- "Introduction to Ergonomics" by R.S. Bridger
- "Ergonomics for Beginners: A Quick Reference Guide" by Jan Dul and Bernard Weerdmeester