

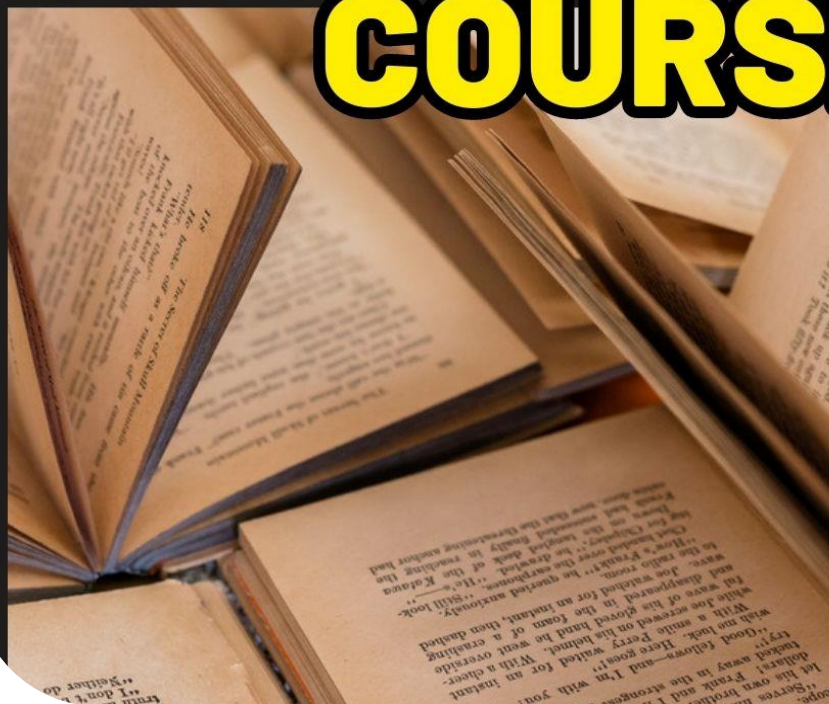


SHRI GURU RAM RAI UNIVERSITY DEHRADUN



VALUE ADDED COURSES

SGRRU





SHRI GURU RAM RAI
UNIVERSITY
Quest for Excellence



SGRR UNIVERSITY

Brochure of Value-Added Courses SGRRIMHS College of Paramedical Sciences 2018-19



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 3500+ 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 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.

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INTRODUCTION

Traditional education provides a strong foundation, but to stay competitive and relevant, individuals must continually enhance their skill set. Enter value-added courses, a gateway to a world of specialized expertise designed to complement and enrich existing knowledge.

Value-added courses go beyond the conventional academic curriculum, offering practical insights and hands-on experience in niche areas. These courses are meticulously crafted to bridge the gap between theoretical learning and real-world application, empowering individuals to navigate the complexities of contemporary professional landscapes.

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 an 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: VAC2018-24

Course Objective:

- Understand the Fundamentals of Hospital-Acquired Infections (HAIs).
- Learn about Infection Control Protocols and Procedures.
- Study Infection Control in Specific Clinical Settings.
- Understand the Role of Surveillance in Infection Control.
- Gain Insight into Policy Development and Implementation.

Course Outcome:

- Mastery of Infection Control Principles.
- Ability to Implement Infection Control Measures.
- Skills in Identifying and Managing Outbreaks.
- Knowledge of Policy and Regulation Compliance.
- Competency in Developing and Evaluating Infection Control Programs.

Course Content:

Module I: Historical journey, organization of hospital infection control, journey of antimicrobials, current scenario and challenges in hospital infection control. Immuno compromised host and a special scenario. Candidates will be introduced to the basics of hospital acquired infections (HAI). The available data on the rate, incidence of hospital acquired infections, their common causes, other epidemiological aspects, their influence of patient outcome and financial implications in developing countries like India will be discussed with them. The overview of the course will be given to the candidates.

Module II: Various routes of transmission of infection and methods of prevention of infectious diseases in hospital settings.

Module III : Role of hospital administration in hospital infection control, hospital infection control committee, infection control team, role of ICN, other staff, infection control manual

References:

- Centers for disease Control and Prevention, Hepatitis A outbreak associated with green onions at a restaurant- Monaca, Pennsylvania, 2003. MMWR 2003; 52 (47): 1155-7.
- Cobb S, Miller M, Wald N. On the estimation of the incubation period in malignant disease, J Chron Dis 1959;9:385-93. Last JM, editor. Dictionary of epidemiology, 4th ed. New York: Oxford University Press; 2001, p. 61

- Principles of Food Sanitation (Food Science Text Series), 5th Edition 2006,Marriott & R B Gravanni, published by Springer
- Food Poisoning and Food Hygiene. London: Arnold, 1998. Hobbs, Betty C. and Roberts, Diane



Advanced Clinical Reasoning on Shoulder Dysfunction

Course Code: VAC2018-25

Course Objective:

- Understand Osteology and its aspects.
- To acquire conceptual knowledge of Shoulder Dysfunction.
- Gain knowledge about Manual Therapy Technique.

Course Outcome:

- In-depth Understanding of Shoulder Anatomy and Biomechanics.
- Advanced Assessment Skills for Shoulder Dysfunction.
- Expertise in Developing Tailored Treatment Plans.
- Critical Evaluation of Current Research and Treatment Techniques.
- Enhanced Clinical Reasoning and Decision-Making Skills.
- Effective Communication and Patient Education.
- Prevention and Long-term Management Strategies.

Course Contents

Module 1 Osteology: Clavicles, Scapula, Humerus, Joints-definition-classification, Muscles – origin, insertion, action & nerve supply. Biomechanics-The shoulder complex: Structure and components of the shoulder complex and their integrated function

Module 2: Definition of shoulder dysfunction, Patho-physiology, Etiology, Clinical Feature, Complications, Prognosis, Investigations, Differential Diagnosis of the shoulder dysfunction,

Module 3: Use Manual Therapy Technique/ approaches to treat patients with shoulder dysfunction, Physiotherapy Assessment including Subjective and Objective Examinations, Special Test, Diagnostic test, Scales, Outcome measure of the shoulder dysfunction.

References :

- Black d and Dumbleton J. H. clinical Biomechanics 2nd edn. Churchill Livingstone 1987.
- B.D.Chaurasia, Human Anatomy Volume 1, CBS Publishers and Distributors, sixth Edition
- Inderbir's A Textbook on Histology, VasudevaNeelam , 7th edition
- Inderbir Singh: A Textbook on Embryology, 10th edition

- Gray's Anatomy: The Anatomical Basis of Clinical Practice, Susan Standring, 41st edition
- Cunningham Manual of Practical Anatomy Vol. I, II, III, Churchill Livingstone.
- McMinn's et al-A Colour Atlas of Human Anatomy, Mosby
- Asterion—The Practical Handbook of Anatomy by Harishanker JS, Ajay Sasi, Avinash
- Netter's Atlas of Human Anatomy
- Principles of Anatomy And Physiology 14th Ed G. Tortora and Bryan
- Cynthia C Norkin, Joint Structure and Function – A comprehensive Analysis, Jaypee Brothers, Fifth Edition
- Basic Biomechanics of the Musculoskeletal System by Margareta Nordin & Victor H. Frankel, 4th Edition.
- Sullivan P.D. and Minor M.A. An Integrated Approach to Therapeutic Exercises Resten 1982. 3.
- Donatelli R. ed. Physical Therapy of the Shoulder, 2nd edn Churchill, Livingston 1991.

CT & MRI

Course Code: VAC2018-26

Course Objective:

- To remember the role of computed tomography in imaging field.
- To interpret the useful effects of magnetic field in diagnostic radiology.
- To compare the various imaging modalities.

Course Outcome:

- Comprehensive Understanding of CT and MRI Principles.
- Proficiency in CT and MRI Techniques.
- Skills in Image Interpretation.
- Knowledge of Safety and Best Practices.
- Application of CT and MRI in Clinical Practice.
- Understanding of Advanced Techniques and Innovations.
- Effective Communication and Collaborative Skills.
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Course Contents

Module I: Ionizing and non-ionizing radiation, Production of X-Rays, Properties of X-rays, Basic Principle of Computed Tomography, Historical developments and various generations of Computed Tomography, Its clinical applications.

Module II: Magnetism-Magnetic Susceptibility, Magnetic Field, Units of Magnetic Field, Types of magnets- Permanent Magnet, Resistive Magnet, Superconducting Magnet, Principle: Principles of magnetic resonance imaging-Motion within the atom-MR active nuclei-Hydrogen nucleus-NMV-Spin-Alignment-Classical Theory- Quantum Theory- Precession-Spin Wobble-Larmor Equation-Gyromagnetic Ratio-Resonance-MR Signal- Free Induction Decay- Relaxation-T1 Recovery- T2 Decay

Module III : Advantages of CT over X-Ray, Limitations and Advancements of computed tomography, Advantages of MRI over X-Ray, Difference between CT & MRI

References :

- Christensen's Physics of Diagnostic Radiology by Thomas S. Curry
- MRI at a Glance. Catherine Wristbrook.
- Textbook of Radiology for Residents and Technicians by S.K Bhargava. Sumeet Bhargava Fourth Edition

Establishment of Clinical Laboratory Safety

Course Code: VAC2018-27

Course Objective:

- Introduction of laboratory safety rules, practices and guidelines.
- To perform proper washing techniques.
- Introduction of different sterilization methods.
- To study different laboratory instruments and their principles.
- Overall improvement in standardization of instruments.

Course Outcome:

- Comprehensive Understanding of Laboratory Hazards.
- Proficiency in Implementing Safety Protocols.
- Skills in Risk Assessment and Management.
- Knowledge of Regulatory Compliance and Standards.
- Emergency Preparedness and Response.
- Effective Communication and Training Skills.
- Waste Management and Environmental Safety.
- Continuous Improvement and Safety Audit Skills.

Course Contents:

Module 1: Laboratory safety rules: Good Laboratory practices, General safety guidelines, Laboratory attire, Hygienic practices. Washing of Glassware and Wrapping: Basic steps of cleaning for glasswares and plastic wares.

Module 2: Methods of Sterilization, Dry heat sterilization, Gas sterilization, Sterilization by Radiation, Sterilization.

Module 3: Basic science lab instruments and their principle. Standardization of Instruments.

References:

- Centers for disease Control and Prevention, Hepatitis A outbreak associated with green onions at a restaurant- Monaca, Pennsylvania, 2003. MMWR 2003; 52 (47): 1155-7.
- Cobb S, Miller M, Wald N. On the estimation of the incubation period in malignant disease, J Chron Dis 1959;9:385-93. Last JM, editor. Dictionary of epidemiology, 4th ed. New York: Oxford University Press; 2001, p. 61
- Principles of Food Sanitation (Food Science Text Series), 5th Edition 2006,Marriott & R B Gravanni, published by Springer