

# **SGRR UNIVERSITY**

**Brochure of Value-Added Courses  
SGRRIMHS School of Paramedical  
Sciences  
2020-2021**

# 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 7000+ 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 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.

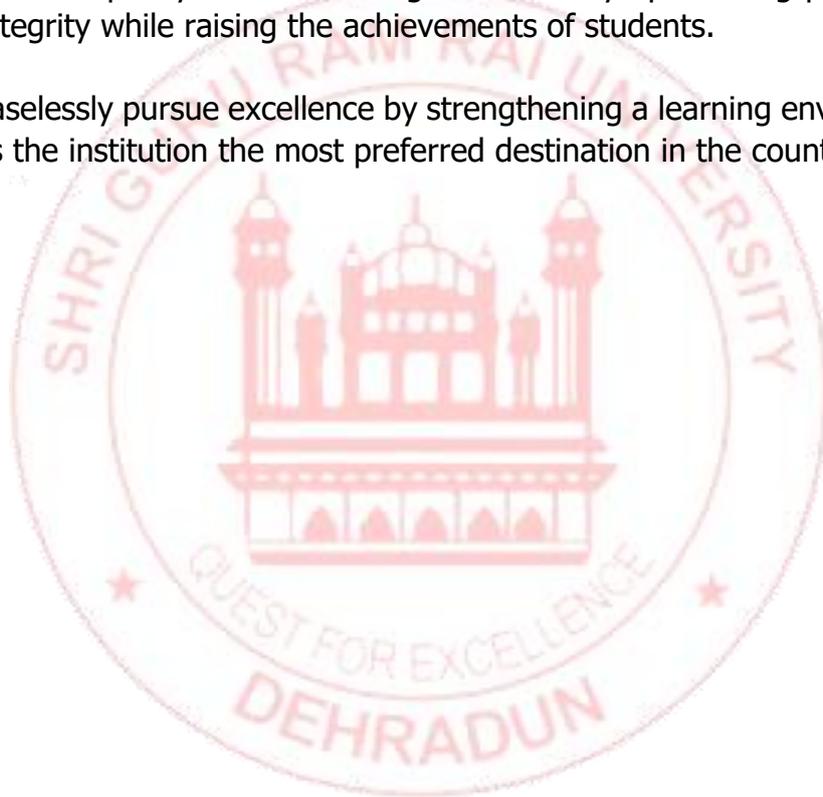
## Vision

“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.



## Basic Medical and Surgical Skill

Course Code: VAC2020-30

### Course Objective:

- Basic surgical skills course aims to teach, assess, and certify trainees' ability to use safe
- surgical techniques. The course also provides foundational knowledge and hands-on
- experience in key surgical skills areas.

### Course Outcome:

- Defining the techniques and principles of suturing and stitching.
- Demonstrating a safe set of aseptic skills
- Recognizing the function, and demonstrating the safe handling, of a basic set of instruments
- Demonstrating safe and appropriate tissue handling

### Course Contents

#### Module 1:

Introduction to Patient Care Responsibilities, General Patient Care Patient transfer technique, obtaining vital signs Laying up a sterile trolley IV injection administration, Patient Education Communication, Patient communication problems, Explanation of examinations.

#### Module 2:

Gowning, gloving, laying safe surgical knots and local anaesthetic management; Tissue handling practice (including for infected and contaminated tissues), along with the requirements for differing tissue sites, such as skin, bowel or vessels; Electrosurgery device usage

#### Module 3:

- Surgical hand ties.
- Surgical instrument ties.
- Tying at depth.
- Basic skin incision.

Molecular diagnostics of

- infectious disease
- Suturing.
- I&D of abscess.

- Drainage of cyst.
- Wide local excision of skin lesion with wound closure (WLE)

### **REFERENCES:**

- Practical Medical Oncology Textbook by Antonio Russo, Marc Peeters
- Faiz M. Khan. (Khan's The Physics of Radiation Therapy). Faiz M. Khan and John P. Gyvbons. Fifth Edition



## Molecular diagnostics of infectious disease

Course Code: VAC2020-31

### Course Objective:

Interpret and report molecular results in association with pathological and laboratory findings and clinical history to reach a final diagnosis. Make recommendations for follow-up or confirmatory molecular studies. Assess the sensitivity and specificity of molecular testing for an individual patient's disease state.

### Course Outcome:

- The basics and principle of applications of various molecular diagnostic methods.
- Selection of an appropriate diagnostic method/tool for a particular disease condition and sample type.
- Adequate knowledge about recent advances and technological developments in the field of diagnostics.

### Course Contents

**Module I: Basics of Diagnostic Techniques:** Polymerase chain reaction (PCR), Recombinant DNA technology, Enzyme-linked immune sorbent assay (ELISA), Chromosomal techniques, DNA and RNA sequencing

**Module II : Advanced Techniques:** In situ hybridization, Microarray analysis, Western blot analysis, Immuno-histochemistry, Protein mass spectroscopy

**Module III : Biochemical Techniques:** Imaging based diagnosis, Biochemical testing, Histopathology, Flow cytometry, Blood cell screening.

### REFERENCES:

- Harald H. Kessler. Molecular Diagnostics of Infectious Diseases. Publisher De Gruyter 2012. <https://doi.org/10.1515/9783110278927>.
- Udo Reichl. Methods in Molecular Medicine. Humana Press 1998. (MIMM, volume 13).

# Clinical Studies Data Management and Medical Writing

**Course Code: VAC2020-32**

## Course Objectives:

CDM is the process of collection, cleaning, and management of subject data in compliance with regulatory standards. The primary objective of CDM processes is to provide high-quality data by keeping the number of errors and missing data as low as possible and gather maximum data for analysis.

## Course Outcome:

- To introduce and familiarize students with medical words through knowledge of roots, prefixes, and suffixes.
- To understand the concept of Utilize diagnostic, surgical, and procedural terms and abbreviations related to the integumentary system
- Define concept of Data entry and management on electronic health record system.

## Course Content

### Module I :

Derivation of medical terms.

Define word roots, prefixes, and suffixes.

Conventions for combined morphemes and the formation of plurals.

### Module II :

Basic medical terms in health care and physiotherapy. Form medical terms utilizing roots, suffixes, prefixes, and combining roots. Interpret basic medical abbreviations/symbols.

### Module III :

Utilize diagnostic, surgical, and procedural terms and abbreviations related to the integumentary system, musculoskeletal system, respiratory system, cardiovascular system, nervous system, and endocrine system. Interpret medical records/reports. Data entry and management on electronic health record system.

## References:

- Gerritsen MG, Sartorius OE, vd Veen FM, Meester GT. Data management in multi-center clinical trials and the role of a nation-wide computer network. A 5 year evaluation. *Proc Annu Symp Comput Appl Med Care*. 1993:659–62.
- Lu Z, Su J. Clinical data management: Current status, challenges, and future directions from industry perspectives. *Open Access J Clin Trials*. 2010;2:93–105.



## Free exercise

**Course Code: VAC2020-33**

### **Course Objective:**

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.

### **Course Outcome:**

Apply the knowledge of exercise therapy for the application of physiotherapeutic treatment.

Understand the usage of free exercises and joint wise.

Student will able to learn the techniques for restoration of physical function.

### **Course Contents**

#### **Module I : Introduction:**

Free exercise: Classification, principles: Techniques, indications, contraindications, effects and uses, Neck Movements, Trunk Movements.

#### **Module II : Upper Limb:**

Shoulder Movements, Elbow Movements, Wrist Movements

#### **Module III : Lower Limb:**

Hip Movements, Knee Movements, Ankle Movements

### **REFERENCES:**

- Practical Exercise Therapy, Hollis M
- Principles of Exercise Therapy CRC Press.
- Manipulation Mobilization, Edmond, S.L.