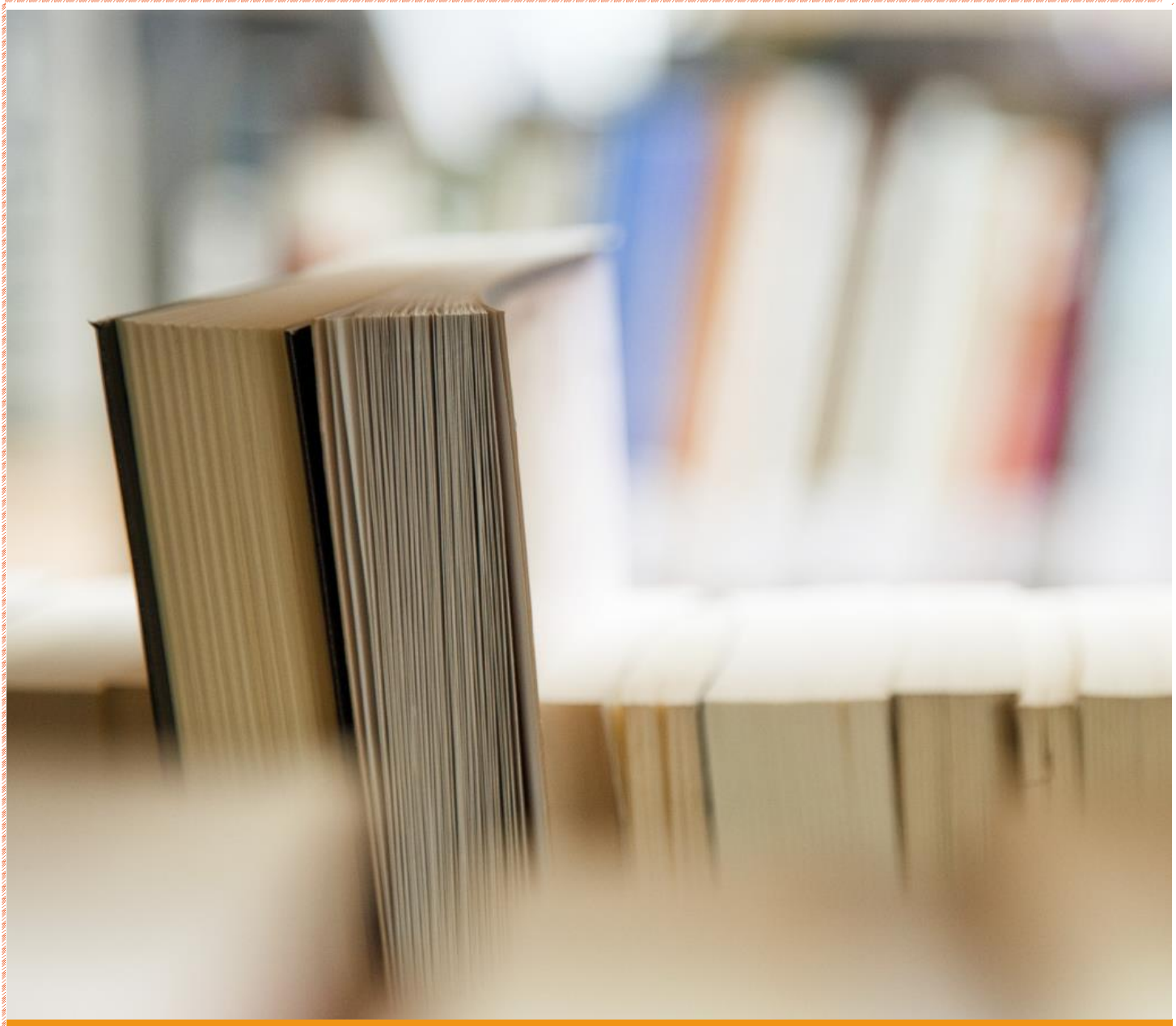

SGRR UNIVERSITY

Brochure of Value-Added Courses SGRR Institute of Medical & Health Sciences 2022-2023

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.

Clinical Nutrition

Course Code: VCSMIHS008

Course Objectives:

- To establish a foundational understanding of nutritional science relevant to clinical practice.
- To understand the role of nutrition in disease prevention, management, and treatment.
- To gain knowledge of various nutritional therapies and their application in different clinical scenarios.
- To understand the changing nutritional needs throughout the human life cycle.
- To explore advanced topics and recent developments in the field of clinical nutrition.

Course Outcome:

- Students will develop a foundational understanding of nutritional science, including the functions and requirements of macronutrients and micronutrients.
- Participants will comprehend the role of nutrition in the prevention and management of various diseases.
- Students will acquire knowledge of specialized nutritional therapies.
- Participants will demonstrate an understanding of nutritional requirements at different stages of life.

Course Content:

Module I: Fundamentals of Clinical Nutrition

- Macronutrients and Micronutrients: Functions and requirements.
- Digestion, Absorption, and Metabolism: Understanding how the body processes nutrients.
- Nutritional Assessment and Screening: Techniques and tools used in clinical settings.

Module II: Nutrition and Disease Management

- Nutrition in Chronic Diseases: Diabetes, cardiovascular diseases, renal diseases.
- Nutrition and Cancer: Diet during cancer treatment and for cancer prevention.
- Gastrointestinal Disorders: Nutritional strategies for managing conditions like IBS, Crohn's disease, celiac disease.

Module III: Clinical Nutrition Therapies

- Enteral and Parenteral Nutrition: Indications, administration, and monitoring.
- Diet Modification Strategies: Texture-modified diets, allergy management.
- Nutritional Support in Surgery and Critical Illness.

Module IV: Life Cycle Nutrition

- Pediatric Nutrition: Growth and development, pediatric nutrition issues.
- Nutrition in Pregnancy and Lactation.
- Geriatric Nutrition: Addressing the needs of the elderly population.

Module V: Advanced Topics in Clinical Nutrition

- Nutrigenomics: The relationship between nutrition and genetics.
- The Gut Microbiome and Nutrition.
- Emerging Trends and Research in Clinical Nutrition.

References:

- Krause's Food & the Nutrition Care Process" by L. Kathleen Mahan and Janice L Raymond.
- "Clinical Nutrition: A Functional Approach" by the Institute for Functional Medicine.
- "Advanced Nutrition and Human Metabolism" by Sareen S. Gropper and Jack L. Smith.
- "Nutrition Therapy and Pathophysiology" by Marcia Nelms and Kathryn P. Sucher.
- "Enteral and Parenteral Nutrition: A Clinical Handbook" by Carolyn Leontos and Mary McCarthy.
- "Pediatric Nutrition in Practice" by B. Koletzko, J. Bhatia, Z.A. Bhutta, and P. Cooper.

Water Borne Diseases and their Prevention

SHRI GURU RAM RAI UNIVERSITY
Quest for Excellence

Course Code: VCSMIHS009

Course Objectives:

- Understand the basics of water-borne diseases, their causes, and the impact on public health.
- Identify common water-borne pathogens and understand how water gets contaminated
- Explore methods to prevent water-borne diseases through effective water treatment and sanitation practices.
- Understand the importance of monitoring water quality and implementing surveillance systems.
- Empower individuals and communities to actively participate in preventing water-borne diseases.

Course Outcome:

- Comprehensive Understanding of Water-Borne Diseases.
- Knowledge of Prevention and Treatment Methods.
- Skills in Water Quality Monitoring and Surveillance.
- Community Engagement and Advocacy.

Course Content:

Module I: Introduction to Water-Borne Diseases

- Overview of water-borne diseases: Examples include cholera, typhoid, dysentery, and giardiasis.
- Sources of contamination: Understanding how water becomes contaminated with pathogens.
- Global and local impact: Exploring the prevalence and consequences of water-borne diseases.

Module II: Common Pathogens and Water Contamination

- Types of pathogens: Bacteria, viruses, parasites, and fungi.
- Routes of contamination: Surface water pollution, sewage contamination, and inadequate water treatment.
- Case studies: Examining historical and recent incidents of water-borne disease outbreaks.

Module III: Prevention and Water Treatment

- Water treatment methods: Filtration, chlorination, and other purification techniques.
- Safe storage practices: Importance of proper water storage to prevent recontamination.

- Community-level interventions: Promoting hygiene, sanitation, and community education.

Module IV: Water Quality Monitoring and Surveillance

- Water quality parameters: Parameters for assessing the safety of drinking water.
- Monitoring techniques: Introduction to water testing kits and laboratory analysis.
- Early detection and response: Establishing surveillance systems for rapid response to potential outbreaks.

Module V: Community Engagement and Advocacy

- Community education: Providing information on hygiene practices and disease prevention.
- Advocacy for clean water: Promoting policies and practices that ensure access to safe drinking water.
- Case studies: Successful community-led initiatives in water-borne disease prevention.

References:

- "Control of Waterborne Diseases" by Steve Hrudey and Elizabeth Hrudey.
- "Waterborne Pathogens: Detection Methods and Applications" edited by Helen Bridle.
- "Safe Water, Sanitation, and Early Childhood Malnutrition" by Aidan Cronin and Tom Slaymaker.
- "Handbook of Water and Wastewater Microbiology" edited by Duncan Mara and Nigel J. Horan.
- "Global Water: Issues and Insights" edited by R. Quentin Grafton, Paul Wyrwoll, Chris White, and David Allendes.
- "Environmental Health: From Global to Local" by Howard Frumkin.
- "Principles of Environmental Sciences" edited by Jan J. Boersema and Lucas Reijnders**.**