

SHRI GURU RAM RAI UNIVERSITY DEHRADUN







SGRR UNIVERSITY

Brochure of Value-Added Courses

School of Pharmaceutical Sciences



ABOUT THE SCHOOL

School of Pharmaceutical Sciences was established as a constituent school of Shri Guru Ram Rai University via University act no. 03 of 2017. Earlier it was running under the umbrella of Shri Guru Ram Rai Education Mission as Department of Pharmaceutical Sciences since 1997. The School has provided its traditional and ideals while keeping pace with societal and technological advancements. This motto has enabled us to emerge as one of the strong pillars of the edifice of higher education. The School strives to provide the tools of continuous learning, imbibe skills of creativity, nurture attitude of problem-solving and qualities of leadership in its students.



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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.
- \checkmark 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.







SCHOOL OF PHARMACEUTICAL SCIENCES



Health Education and First Aid

Course Code : VACSPS001

Course Objectives:

- 1. To understand the importance of health, wellness and nutrition in daily life.
- 2. To understand about the cause and prevention of certain diseases.

Course Outcomes:

- 1. Know about models of health and types of abuses.
- 2. Describe the behavioural, environmental & genetic risk factors for chronic diseases.
- 3. Explain the role of Nutrition in body fitness.
- 4. Learn about first aid in burning & other emergency conditions.

Module I: Introduction to health, wellness, models of health and types of abuses.

Module II: Basic introduction to types of diseases, their causes and possible recoveries.

Module III: Basics of Nutrition and Fitness, food pyramids, nutrients and fitness.

Module IV: First Aid For burning, and other emergency conditions.

Module V: Demonstration of CPR.

Reference Books:

- 1. Ewles L and SimnetI, Promoting Health: A Practical Guide To Health Education.
- 2. Haralambos& Holborn Sociology: Themes and Perspectives by Karen Glanz, Barbara K. Rimer, and K. Viswanath: Health behavior and health education : theory, research, and practice.
- 3. Dr Sunder Lal ,Dr Adarsh and Dr Pankaj :Textbook of Community Medicine.
- 4. K. Park, Park's Textbook of preventive and social medicine
- 5. Latha Ganti Stead and S. Matthew Stead: Basic Nursing and First Aid. 1. " First Aid Radiology for the Wards (First Aid Series)"
- **6.** Alton L Thygerson.: First Aid and CPR. 1. "First Aid, CPR and AED Standard: Meets the Most Current and ECC Guidelines".



Pharmaceutical Marketing and Sales

Course Code : VACSPS002

Course Objectives:

- 1. To imparts significant knowledge about the fast-changing market demands in pharmaceutical field.
- 2. To explores various opportunities in the pharma marketing field along with imparting knowledge of the growth charts of various companies.

Course Outcomes:

- 1. Describe the concept of pharmaceutical marketing.
- 2. Discuss the emerging concepts of marketing
- 3. Explain the different pharmaceutical marketing channels.
- 4. Discuss the various components of promotion of pharmaceutical products.
- 5. Discuss about pharma branding and advertisement management.

Module I: Marketing: Definition, general concepts, marketing Environment, Demand and supply, Sales charts.

Module II: Top pharmaceutical companies, their growth charts, generic drugs, patents and government policies, emerging concepts in marketing.

Module III: Pharmaceutical Marketing Channels, Professional Sales Representative (PSR), importance of public relations.

Module IV: Product life cycle, portfolio analysis, Product management and promotion strategies. determinants and issues in pricing management.

Module V: Pharma branding and advertisement management.

Reference Books:

 L.M.Prasad, Principles of management, 7th edition, Sultan Chand & Sons, 2008
P.N. Reddy, Principles of Business organisation and Management, S Chand & Co Ltd, 2010



- Philip Kotler Marketing management, 2009 2. Ashok Ranchhod, Marketing Strategies : A Contemporary Approach, Pearson 2011
- 3. Ree Hedley, "Supply Chain Management Delivering Patient Value for Pharmaceuticals and Biologics, (2012), John Wiley & Sons, Inc., USA
- 4. Douglas J. Dalrymple, William L. Cron, Thomas E. DeCarlo. (2004), "Sales Management", John Wiley & Sons, New Jersey, USA.
- 5. Ralph W. Jackson, Robert D. Hisrich (1996), "Sales and Sales Management", Prentice Hall, New Jersey, U





Interpersonal Skills

Course Code : VACSPS003

Course Objectives:

- 1. To enhance the personality of students.
- 2. To bridge the gap between knowledge and communications skills.
- 3. To prepare students to face the outside world.
- 4. To improve communication as well as presentation skills of students.

Module I: Introduction to personality development: significance, theories, success vs failure concepts.

Module II: Attitude and motivation: Development of Positive attitude and concepts of motivation.

NMRA

Module III: Communication Skills: Introduction, types and presentations

Module IV: Personal competence and maturity: Developing Rapport, criticism and Leadership Qualities.

Module V: Self- Management and Employability Quotient

Reference Books:

1. Basic communication skills for Technology, Andreja. J. Ruther Ford,

2nd Edition, Pearson Education, 2011.

2. Communication skills, Sanjay Kumar, Pushpalata, 1stEdition, Oxford Press, 2011.

3. Brilliant- Communication skills, Gill Hasson, 1stEdition, Pearson Life, 2011.

4. The Ace of Soft Skills: Attitude, Communication and Etiquette for success, Gopala Swamy Ramesh, 5thEdition, Pearson, 2013.

5. Communication skills for professionals, Konar nira, 2ndEdition, New arrivals –PHI, 2011



Social health and nutrition

Course Code: VACSPS004

COURSE OBJECTIVES:

- 1. To appreciate the importance of balanced diet.
- 2. To understand the food and nutritional requirements of adults.
- 3. To understand the role of nutrition in weight management, diabetes and cardiovascular disease.
- 4. Knowledge about nutrients in food and their functions.
- 5. Understand the consequences of deficiency of taking nutrients.
- 6. Comprehensive knowledge on the role of nutrients in different stages of human life.
- 7. Knowledge about the different methods of nutritional assessment.

Course Outcomes:

- 1. Utilize knowledge from the physical and biological sciences as a basis forunderstanding the role of food and nutrients in health.
- 2. Students will be able to understand the information to food science and nutrition.
- 3. Apply food science knowledge to describe functions of ingredients infood.
- 4. Gain knowledge about food pyramid, vegetarian diet, menu planning and nutritional needs during infancy to adolescents.

Module I: Introduction to food, health and nutrition:

Explanation of terms- Definition, concept and meaning of health and factors affecting health, Nutrient requirement, Dietary standards, Balanced diet, Food Groups, Functions of food, Food Guides-Food pyramid and Myplate, Food in relation to health. Food a prerequisite to health,

Module II: Nutritional Needs:

Nutrition during infancy, childhood, adolescence and adult, Nutrition during pregnancy& lactation, Nutrition in later maturity period, Nutritional requirements and RDA, Nutrition and infection, Nutrition and immunity, nutrition & stress.

Module III: Food Composition and its Classification

Food as a source of nutrients: classification of nutrients; functions, recommended dietary allowances, BMR, SDA. Vitamins: (A,B complex, C, D, E & K) & all major and minor mineral elements with their role in body, importance of Roughages in the diet,Water & electrolytes balance.Food composition and nutritive values of differentfoods, Functions of foods, Balanced Diet.



Module IV: Community Nutrition

Macronutrients and micronutrients – Carbohydrates, protein, fats, vitamins (A, D, E,K, C and B complex) and minerals (Calcium, phosphorous, sodium, Iron, zinc, Iodineand fluorine)

Methods of Assessment: Direct and Indirect methods of Nutritional assessment ofhuman groups, Techniques for assessment of age and use of reference standards for theassessment of nutritional status.Government Nutrition Programmes- ICDS and Mid-Day Meal Programme (MDMP).

REFERENCE BOOKS:

- SwaminathanM(2007): Essentials of Food and Nutrition(Vol. I & II), 2nd Ed. Bappco.
- Meyer LH (2004): Food Chemistry, CBS Publishers & Distributors.
- Mann J and TruswellS(2017): Essentials of Human Nutrition, 5th Ed. Oxford UniversityPress.
- Pandya R(2010):Community Health Education, Rawat Publications.
- Bamji, M.S., Rao, N.P & Reddy, V. (1996). Textbook of Human Nutrition. Oxford &IBH Publishing Co. (P). Ltd. Delhi.
- Gopalan, G. RamaShastri B.V & Balasuvramnian, S.C. (2000). Nutritive Value of Indian
- Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad500-007, India.
- Sri Lakshmi, B. (2000). Nutrition Science. New Age International (P) Ltd. Pub. New Delhi
- Swaminathan, M. (2009). Textbook of Food and Nutrition. Bappco Publishers, Bangalore.



RESEARCH PAPER WRITING

Course Code: VACSPS005

Course Objectives :

- 1. To understand how to introduce the research problem.
- 2. To understand how to develop the literature review.
- 3. To understand what to include in the research plan.
- 4. To understand what to include in the Method section of a research paper (participants, materials, procedure)
- 5. To achieve and explore academic and research goals.
- 6. Identify and recommend appropriate sources of scientific research information (e.g peer-reviewed journals)
- 7. To be able to clearly and simply state the hypothesis and/or research goal(s) and specific objectives of their project.
- 8. To assemble results of experiments, compose figures and/or tables, organize manuscript in standard scientific format, and provide interpretations in the context of existing knowledge.

Course Outcomes:

Course Outcomes:

- 1. Understand that how to improve your writing skills and level of readability.
- 2. Learn about what to write in each section.
- 3. Understand the skills needed when writing a good quality of paper at very first-time submission.
- 4. Understand how to critically analyze data from research; incorporate it into assigned writing clearly, concisely, and logically; and attribute the source with proper citation.
- 5. Understand the current resources (such as search engines and databases) for locating secondary information, and also understand the strategies of effective primary data gathering.

Module I: Research paper writing:

Types of research paper, Structure of research paper, Research paper format, Abstract writing, Methodology, Results and discussion, different format of referencing, ways of communicating a research paper.

Module II: Thesis writing:

Structure of thesis, Scope of work, Literature review, Experimental/Computational details, primarily studies, Results and discussion, Figures and Tables preparation, conclusion and future works, Bibliography, Appendices.



Module III: Crediting Sources

Paraphrasing, Quotations, Permission to quote, Reprint, or adapt, Referencing.

Module IV: Tools and Techniques:

Various word processors e.g., MS Word, Libra-office, Latex etc., Making effective presentation using Power point and Beamer, Uses of plagiarism detection tools.

References :

- Adrian Wall work, English for Writing Research Papers, Springer New York Dordrecht Heidelberg London, 2011Highman N,
- Handbook of Writing for the Mathematical Sciences, SIAM. Highman's ok 1998.
- Kothari, C. R. (2004). Research Methodology: Methods and Techniques. New Delhi: New Age International.
- Kumar, R. (2005). Research Methodology-A Step-by-Step Guide for. Singapore: Pearson Education.
- Saravanavel, P. (2012). Research Methodology. Allahabad: Kitab Mahal Publishers.

