BSc in Clinical Nutrition

Clinical Nutrition Program booklet

Version 1 (2024)

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1. About The College of Applied Medical Sciences

1.1 Vision:

Faculty of Applied Medical Sciences aspires to be excellent in the field of Applied Medical Sciences and provide academic programs that will be recognized, locally and globally in order to provide high-quality education and scientific research oriented to community services.

1.2 Mission:

- Prepare national distinct graduates able to keep up with technological advances and service in the field of Applied Medical Sciences to improve the quality of health care.
- Direct scientific research to solve the environmental problems and the dissemination of health awareness, which will foster the role of the college in community service.

2. About The Department

The Department of Clinical Nutrition was established in 1431 H with the aim of preparing highly qualified graduates in the field of clinical nutrition.

2.1 Mission:

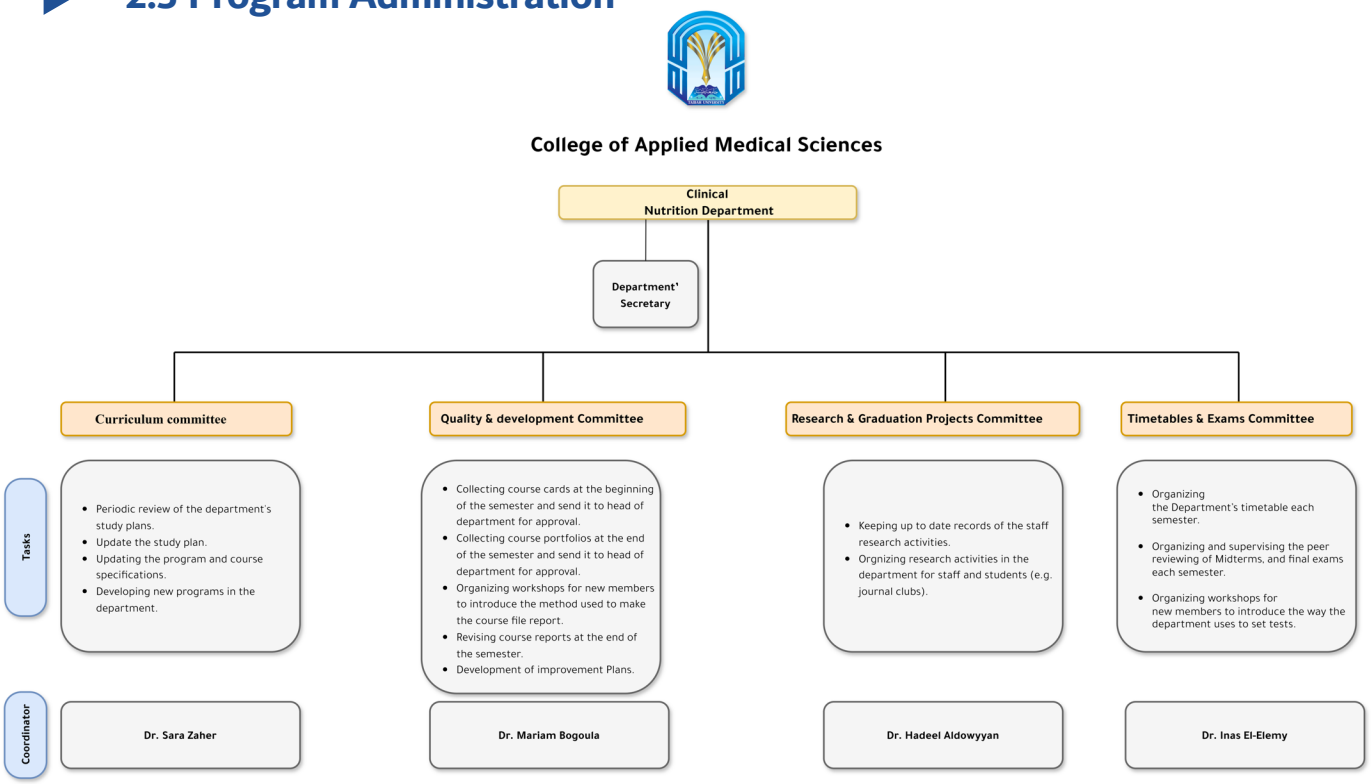
To prepare graduates to become nationally and internationally recognized entry-level dietitians with a comprehensive knowledge in nutrition and its evidence-based application on clinical settings, community, and research to advance the field of clinical nutrition practice in the Kingdom of Saudi Arabia and improve the overall health of individuals and communities.

2.2 Goals:

- To provide high quality and intellectually challenging learning experience that prepares the students to respond to the versatile demands of the dietetics profession.
- To promote diverse training opportunities that enable the students to apply their knowledge and skills in order to provide evidence-based nutrition care in different practice settings and address the nutritional needs of the community.
- To promote adherence to professional ethics and standards in clinical nutrition practice, including confidentiality, patient autonomy, and cultural competence.
- To encourage the development of students' research, technological and interpersonal skills to prepare them for future careers in dietetics and other nutrition related fields.

2. About The Department

2.3 Program Administration



2.4 Staff Contact Information

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3. Part I: Students

Welcome massage:

Dear Students,

Welcome to the Clinical Nutrition Department!

We are excited to have you join us on this journey towards becoming skilled professionals in the field of clinical nutrition. This program is designed to equip you with the knowledge, skills, and practical experience necessary to excel in a rapidly evolving healthcare environment.

As you embark on this educational adventure, we encourage you to embrace every opportunity to learn, engage, and grow. Our dedicated faculty and staff are here to support you, and we invite you to actively participate in classes, discussions, and hands-on experiences.

Remember, nutrition is not just about food, it's about health, well-being, and making a positive impact on the lives of individuals and communities. Together, let’s explore the critical role of clinical nutrition in healthcare and develop the tools to inspire and educate others.

We wish you a successful and fulfilling academic year ahead!

Warm regards,
Clinical Nutrition Department’s staff

3. Part I: Students

3.1 Admission Requirements

- The candidate must be be medically fit.
- Saudi national or a child of Saudi mother.
- The candidate must have obtained a high school diploma in the scientific track within the last two years only.
- The selection will be based on the Academic Achievement based on the weighted percentage of high school percentage (30%), aptitude test score (30%) and achievement test score (40%).
- The minimum weighted percentage for admission is 85%. For more information click here (University Admission Guide)

3.2 Program Learning outcomes and Curriculum Structure

3.2.1 Program Learning Outcomes

3. Program Learning Outcomes*	
Knowledge and Understanding	
K1	Describe the principles of human physiology, pathophysiology, nutrient metabolism, nutritional assessment and requirements through the human lifecycle including the effects of nutrients deficiency and toxicity on human health.
K2	Recognize the dietary standards and guidelines for health promotion, provision and monitoring of different dietary interventions including oral and artificial nutrition support (enteral and parenteral feeding) at individual and community level.
K3	Demonstrate understanding of food systems management as well as the relationships between health promotion, health education, health advocacy, and community counseling and health improvement.
Skills	
S1	Implement the Nutrition Care Process to assess nutritional parameters, diagnose nutrition-related problems, determine the nutritional interventions, initiate, and monitor the effectiveness of the nutritional plans through applying the previously acquired knowledge of human physiology, nutrients metabolism and function.
S2	Apply critical thinking, problem-solving and evidence-based approaches in using technology, lab technique and other dietetic related activities to improve the well-being of individuals and communities.
S3	Conduct high-quality scientific research and other community and inter- professional activities that require analytical skills to draw conclusions.
S4	Use effective counseling and education approaches to facilitate behavior change and enhance the health of individuals and communities.
S5	Communicate effectively, in oral and written format, to multiple audiences including individuals, health professionals, stakeholders, and researchers.
Values, Autonomy, and Responsibility	
V1	Adhere to the code of ethics for healthcare practitioners and values of clinical nutrition practice respective to the patient's culture, ethnicity, and religion.
V2	Demonstrate principles of healthcare leadership, entrepreneurship, lifelong learning, training, and performance management.

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.2 Study Plan: The BSc in Clinical Nutrition is a four years program (including mandatory and elective courses) with mandatory internship year.

First Year	
Level 1	Level 2
○ Islamic Studies (Belief & Worship) ○ Arabic Language Skills (1) ○ English Language Skills (1) ○ Medical Terminology ○ Introduction to Chemistry ○ Human Biology	○ Islamic Studies (Islamic Values& Morals) ○ English Language Skills (2) ○ Academic Learning Skills ○ Human Physiology ○ Human Anatomy ○ Islamic Studies (Islamic Values& Morals)
Second Year	
Level 3	Level 4
○ Fundamentals of Nutrition ○ Nutritional Biochemistry (1) ○ General Pathology ○ Food Safety and Microbiology ○ Specialized Elective Course (1)	○ Arabic Language Skills (2) ○ Nutritional Biochemistry (2) ○ Nutrition Throughout the Life Cycle ○ Nutritional Assessment ○ Food Science ○ Research Methods and Skills
Third Year	
Level 5	Level 6
○ University Elective Course (1) ○ Meal Planning ○ Nutritional Pharmacology ○ Nutrition and Immunity ○ Endocrine and Metabolism ○ Sport Nutrition ○ Basics and Clinical Biostatistics	○ University Elective Course (2) ○ Medical Nutrition Therapy (1) ○ Clinical Nutrition Practicum (1) ○ Nutritional Epidemiology ○ Nutrition Communication and Counselling ○ Community Nutrition ○ Specialized Elective Course (2)
Fourth Year	
Level 7	Level 8
○ University Elective Course (3) ○ Medical Nutrition Therapy (2) ○ Clinical Nutrition Practicum (2) ○ Enteral and Parenteral Nutrition ○ Inherited Metabolic Disorders ○ Pediatric Clinical Nutrition ○ Graduation Project (1)	○ Medical Nutrition Therapy (3) ○ Clinical Nutrition Practicum (3) ○ Management of Nutrition Services in Hospitals ○ Evidence-Based Practice ○ Graduation Project (2) ○ Specialized Elective Course (3)
Elective Course	
○ Nutrition and Health Informatics ○ Essential Soft Skills in Healthcare system ○ Breastfeeding Counselling ○ Food Habits ○ Functional Food ○ Digital skills and Multimedia in dietetic and health practices	○ Nutritional Psychology ○ Health Innovation ○ Feeding Children with Neurodevelopment Disorders ○ Nutrigenomics ○ Nutrition and Cancer

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 1:

- **Medical Terminology (CLN101):**
  This course covers medical terminology and vocabulary used by a variety of professionals in the healthcare field. It focuses on medical and clinical terminology broadly related to human anatomy and physiology and the basic body systems with added emphasis placed on those terms pertaining to diagnosis and pathophysiology. This course also provides the basics of formulating medical terms.

- **Introduction to Chemistry (CHEM 101):**
  This course provides the fundamental principles and concepts of chemistry. Throughout the course, students will explore the basic concepts of matter, atoms, and molecules. The course will also cover topics such as atomic structure, chemical bonding, chemical equations, stoichiometry, states of matter, properties of elements and compounds, and basic thermodynamics.

- **Human Biology (CLS 113):**
  This course is designed to provide students with a comprehensive understanding of human biology within the broader context of biological sciences. Through an exploration of various topics including cell biology, tissue and organ structure and function, reproduction, genetics, and more. Students will gain insight into the intricacies of the living world with a particular emphasis on the human body. Key areas of focus will include the structure and function of biological entities, elucidating the mechanisms underlying processes such as digestion, excretion, respiration, and reproduction.

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 2:

- **Academic Learning Skills (CLN 106)**
  This course is designed to equip students with essential strategies and techniques to enhance their academic performance and success. Throughout the course, students will explore a range of topics and engage in practical activities to develop their learning skills. The course covers variety of subjects including memory building, preparations for exams, presentation skills, effective reading, academic writing, as well as note-taking and listening skills.

- **Human Physiology (CLN 126)**
  This course describes the normal functioning of the human body, focusing on the integration of various physiological systems and their interactions. It emphasizes the principles and concepts underlying the regulation of body functions and the maintenance of homeostasis.
  — **Prerequisites:** Human Biology (CLS 113)

- **Human Anatomy (ANAT 151)**
  This course is designed to provide the clinical nutrition students with an overview of normal structure of the body and major systems. The course then takes an organ-system level approach to study the structure of the integument, the skeleton and articulations, skeletal muscles, and other body systems. Laboratory study is enhanced via anatomic models. A background of anatomy and medical terminology is required.
  — **Prerequisites:** Human Biology (CLS 113)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 3:

- **Fundamentals of Nutrition (CLN 211)**
  The course describes the scientific basis of human nutrition and how nutrition can promote health maintenance. It focuses on the digestion, absorption, transport, of macronutrients (carbohydrate, protein, and fat) and key micronutrients as well as functions and dietary sources of these nutrients. This course also covers the energy metabolism, energy balance, and dietary guidelines and recommendations for healthy individuals.
  - **Prerequisites:** Human Biology (CLS 113), Introduction to Chemistry (CHEM 101)

- **Nutritional Biochemistry (1) (CLN 213)**
  This course provides the basic understanding of the chemical processes and interactions that occur within the human body in relation to food and nutrition. It explores how nutrients are metabolized, absorbed, and utilized by the body, with particular emphasis on functions and roles of carbohydrate, fat, and protein in energy production, growth, and maintenance of body tissues.
  - **Prerequisites:** Introduction to Chemistry (CHEM 101)

- **General Pathology (CLN 221)**
  The course covers integrated concepts of human organ system dysfunctions, with particular emphasis on general pathophysiology and systemic pathophysiology including cardiovascular, renal, liver, GIT, respiratory and nervous system disorders. This course focuses on the pathophysiology of each system, underlying disease mechanisms, manifestations and clinical investigations.
  - **Prerequisites:** Human Biology (CLS 113), Introduction to Chemistry (CHEM 101), Medical Terminology (CL 101)

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 3:

- **Food Safety and Microbiology (CLN 215)**
  This course provides basic information related to food safety and microbiology, including micro-organisms in foods (bacterial and non-bacterial agents of foodborne illness), food spoilage, preservation, and fermentation, and microbiological quality assurance system. This course also covers methods for the microbiological examination of foods.
  - **Prerequisites:** Human Biology (CLS 113)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 4:

- **Nutritional Biochemistry (2) (CLN 214)**
  This course provides students with a comprehensive understanding of the structure, function, and metabolism of nucleic acids and vitamins. The course explores the fundamental principles underlying the role of nucleic acids (DNA and RNA) and vitamins in cellular processes and human health
  - **Prerequisites:** Nutritional Biochemistry (1) (CLN 213)

- **Nutrition through the Lifecycle (CLN 216)**
  This course provides an overview of the anatomical, physiological, and biochemical changes that occur during the different stages of human life cycle. Topics related to energy and nutrient requirements for healthy humans throughout the life cycle will be covered. Students will also learn about the rationale for establishing nutritional requirements through the life cycle and realistic means of meeting these requirements.
  - **Prerequisites:** Fundamentals of Nutrition (CLN 211)

- **Nutritional Assessment (CLN 238)**
  This course introduces concepts of nutritional assessment, including the dietary, anthropometric, biochemical, and clinical methods. Applications of the Nutrition Care Process (NCP) will be covered to formulate nutrition care plans for individuals and solve nutritional problems.
  - **Prerequisites:** Fundamentals of Nutrition (CLN 211)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 4:

- **Food Science (CLN 212)**
  This course will cover basic information related to food's physical, chemical, and biochemical nature and the standards of nutritional processing, safety, and food quality. The chemical and physical changes occurring to the food from production to consumption are also highlighted.
  — **Prerequisites:** Fundamentals of Nutrition (CLN 211)

- **Research Methods and Skills (CLN 207)**
  Students in this course will be introduced to the basics of clinical research methodology, including study designs, sampling methods, sample size calculation, and ethical concerns in clinical research.

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 5:

- **Meal Planning (CLN 311)**
  This course covers all aspects related to meal planning for healthy individuals from different age groups and socioeconomic status. Topics related to label reading, meal planning for Individuals on vegetarian diets, consistency altered diet, diabetes diet, low fat diets, and low protein diets will be also covered.
  - **Prerequisites:** Nutrition Throughout the Life Cycle (CLN 216), Nutritional Assessment (CLN 238)

- **Nutritional Pharmacology (CLN 321)**
  This course provides basic knowledge regarding pharmacotherapy and nutrient-drug interactions. It is designed to cover how medications, nutrients, and disease states interact and affect one another, with special reference to those interactions that are clinically significant and relevant to practice
  - **Prerequisites:** General Pathology (CLN 221), Nutritional Biochemistry (2) (CLN 214), Fundamentals of Nutrition (CLN 211)

- **Nutrition and Immunity (CLN 323)**
  This course provides an in-depth understanding of the relationship between nutrition and the immune system. It explores how proper nutrition can play a vital role in supporting a healthy immune response, preventing infections, and promoting overall well-being.
  - **Prerequisites:** Fundamentals of Nutrition (CLN 211)

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 5:

- **Endocrine Metabolism (CLN 325)**
  This course focuses on the studying the endocrine system and its relationship to metabolism. It encompasses the understanding of various hormones, their synthesis, secretion, and regulation, as well as their impact on metabolic processes within the body.
  - **Prerequisites:** Human Physiology (CLN 126)

- **Sports Nutrition (CLN 317)**
  This course provides an in-depth understanding of the nutritional needs of athletes and individuals involved in physical activity. The course covers various aspects of nutrition, including macronutrients (carbohydrates, proteins, and fats), micronutrients (vitamins and minerals), hydration, and supplementation strategies to improve the athletic performance.
  - **Prerequisites:** Nutritional Biochemistry (2) (CLN 214), Fundamentals of Nutrition (CLN 211)

- **Basic and Clinical Biostatistics (CLN 308)**
  This course introduces the fundamental concepts and methods of statistics as applied to healthcare-related fields. The course aims to equip students with the necessary statistical tools to analyze and interpret data through series of lectures, practical exercises, and assignments.

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 6:

- **Medical Nutrition Therapy (1) (CLN 332)**
  This course focuses on using evidence-based nutrition interventions to treat and manage various medical conditions. It involves the assessment, diagnosis, and treatment of nutritional issues and their impact on health outcomes. The course also covers the physiological and clinical basis of malnutrition related disorders, food allergy and intolerance as well as the diseases affecting cardiovascular, hematological, and endocrine system.

— **Prerequisites:** General Pathology (CLN 221), Meal Planning (CLN 311)
— **Co-requisites:** Clinical Nutrition Practicum (1) (CLN 342)

- **Clinical Practicum 1 (CLN 342)**
  This course is intended to provide students with supervised experience in clinical settings, allowing them to apply the previously acquired knowledge and skills in real-world patient care scenarios to manage cases of malnutrition related disorders, food allergy and intolerance as well as cases with diseases affecting the cardiovascular, hematological, and endocrine systems. The course typically involves hands-on training and direct interaction with patients under the guidance and supervision of experienced professionals.

— **Prerequisites:** General Pathology (CLN 221), Meal Planning (CLN 311
— **Co-requisite:** Medical Nutrition Therapy (1) (CLN 332)

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 6:

- **Nutritional Epidemiology (312)**
  In this course students will be introduced to the field of nutritional epidemiology and the process of obtaining valid and reliable dietary, biochemical, and anthropometric data. Topics related to gene–nutrient interactions, diet and disease relationships in selected health conditions, nutritional epidemiology in developing countries, and translating the findings of nutritional epidemiological studies into guideline and health policy will be also covered.
  - **Prerequisites:** Nutritional Assessment (CLN 238), Research Methods and Skills (CLN 207)

- **Nutrition Communication and Counseling (CLN 314)**
  This course will provide an overview of the principles and application of effective communication in the professional dietetic workplace, with a focus on achieving successful communication in various situations, including one-on-one counselling with clients, educating small groups, providing nutrition education to the community, collaborating with the media, working with individuals from diverse cultural backgrounds, and participating in meetings and conflict resolution.
  - **Prerequisites:** Meal Planning (CLN 311)

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 6:

- **Community Nutrition (CL 316)**
  Students in this course will examine the role of nutrition in preventing, promoting, maintaining, and improving health in the community. It investigates aspects of the emerging health delivery system, nutrition policies, social marketing, and entrepreneurial ventures. Students will study the scientific aspects of nutrition education, developing and applying community-based nutrition programs. This course will also cover the role of global food insecurity, malnutrition and hunger and their interactions.
  - **Prerequisites:** Nutrition Throughout the Life Cycle (CL 216), Nutritional Assessment (CL 238)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 7:

- **Medical Nutrition Therapy (2) (CLN 431)**
  This course focuses on using evidence-based nutrition interventions to treat and manage various medical conditions. It involves the assessment, diagnosis, and treatment of nutritional issues and their impact on health outcomes. The course also covers the physiological and clinical basis of neoplastic diseases and the diseases affecting the gastrointestinal and the renal system.
  - **Prerequisites:** Medical Nutrition Therapy (1) (CLN 332)
  - **Corequisites:** Clinical Nutrition Practicum (2) (CLN 441)

- **Clinical Nutrition Practicum (2) (CLN 441)**
  This course is intended to provide students with supervised experience in clinical settings, allowing them to apply the previously acquired knowledge and skills in real-world patient care scenarios to manage cases with cancer, gastrointestinal and renal disorders. The course typically involves hands-on training and direct interaction with patients under the guidance and supervision of experienced professionals.
  - **Prerequisites:** Clinical Nutrition Practicum (1) (CLN 342), Medical Nutrition Therapy (1) (CLN 332)

- **Enteral and Paranteral Nutrition (CLN 433)**
  This course discusses the clinical circumstances where enteral or parenteral nutrition support are indicated and the ethical considerations around nutrition support. It is designed to provide students with the required knowledge and skills to design, implement, assess, and monitor routine enteral and parenteral feeding regimens.
  - **Prerequisites:** Medical Nutrition Therapy (1) (CLN 332)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 7:

- **Inherited Metabolic Disorders (CLN 435)**
  This course focuses on understanding the underlying biochemical and genetic basis of inborn errors of metabolism, as well as the nutritional management strategies required to optimize the health and well-being of affected individuals. This course covers diseases including phenylketonuria, maple syrup urine disease, galactosemic, Glycogen storage disease, homocystinuria, Medium-chain Acyl-CoA Dehydrogenase (MCAD) deficiency and familial hypercholesterolemia.
  - **Prerequisites:** Medical Nutrition Therapy (1) (CLN 332)

- **Pedatric Clinical Nutrition (CLN 437)**
  This course offers a holistic approach to optimize the nutritional care for infants, children, and adolescents. The course provides a comprehensive understanding of the role of nutrition in health and disease. The course also describes the therapeutic nutritional approaches used to manage different medical conditions in pediatrics.
  - **Prerequisites:** General Pathology (CLN 221), Meal Planning (CLN 311)

- **Graduation Project (1) (CLN 491)**
  This course is designed to provide students with an opportunity to apply the knowledge and skills they have acquired throughout their academic studies to formulate and address a relevant research question in the field of clinical nutrition through comprehensive review of the current literature and research in the field
  - **Prerequisites:** Nutritional Epidemiology (CLN 312), Basic and Clinical Biostatistics (CLN 308)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 8:

- **Medical Nutrition Therapy (3) (CLN 432)**
  This course focuses on using evidence-based nutrition interventions to treat and manage various medical conditions. It involves the assessment, diagnosis, and treatment of nutritional issues and their impact on health outcomes. The course also covers the physiological and clinical basis of the metabolic stress, organ transplantation, Human Immunodeficiency Virus (HIV) disease as well as the diseases affecting the respiratory and neurological systems.
  - **Prerequisites:** Medical Nutrition Therapy (2) (CL 431)
  - **Co-requisites:** Clinical Nutrition Practicum (3) (CLN 442)

- **Clinical Nutrition Practicum (3) (CLN 442)**
  This course is intended to provide students with supervised experience in clinical settings, allowing them to apply the previously acquired knowledge and skills in real-world patient care scenarios to manage critically ill and patients undergoing organ transplant as well as cases with respiratory and neurological disorders. The course typically involves hands-on training and direct interaction with patients under the guidance and supervision of experienced professionals.
  - **Prerequisites:** Clinical Nutrition Practicum (2) (CLN 342), Medical Nutrition Therapy (2) (CLN 431)

- **Management of Nutrition Services in Hospitals (CL 412)**
  Students in this course will be introduced to basic management tools including decision-making, communication, and marketing. This course will also cover important topics related to menu planning, quantity food production, human and financial resources, food legislation and labelling, quality assurance, and quality control.
  - **Prerequisites:** Food Safety and Microbiology (CL 242), Meal Planning (CL 341)

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

Level 8:

- **Evidence-Based Practice (CL 444)**
  Students in this course will be introduced to the concept of evidence-based practice and the steps needed to make evidence-informed decisions. Students will also learn how to discuss evidence with patients to make collaborative decisions and how to implement and embed evidence-based practice into routine clinical care.

- **Graduation Project (2)**
  This course is designed to provide students with an opportunity to apply the knowledge and skills they have acquired throughout their academic studies to perform statistical analysis, report findings, writing discussion and conclusion, and communicating their research work.
  — **Prerequisites:** Graduation Project (1) (CL 491)

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

List of specialized Elective Courses:

Specialized elective (1)

- **Health Informatics (CLN 252)**
  This course provides a comprehensive introduction to Health Informatics, with a special focus on its application in dietetic practice. Students will gain essential knowledge, concepts, and skills related to how data, information, and knowledge are generated, managed, and processed through Information and Communication Technology (ICT).

- **Essential soft Skills in healthcare System (CLN 253)**
  This course provides students with the personal and professional competencies required for success in healthcare environments. Instruction focuses on effective interpersonal skills, cultural awareness, collaborative problem-solving, diagnostic reasoning, quality improvement, and principles of management and team leadership. The course emphasizes real-world scenarios to build skills not only in delivering excellent work, but also demonstrating compassion, integrity, time management, accountability, and professional appearance and professionalism.

- **Breastfeeding Counseling (CLN 254)**
  This course is designed to provide students with the knowledge and skills necessary to support, educate, and counsel breastfeeding mothers and their families. The course aims to develop a comprehensive understanding of the principles and practices of breastfeeding counseling, focusing on the promotion, protection, and support of breastfeeding in various settings.

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

List of specialized Elective Courses:

Specialized elective (1)

- **Food Habits (CLN 257)**

  This course explores the relationships between food, culture, and individual's eating behavior. Students will understand how historical, social, and psychological factors shape food choices and eating patterns across different communities through a blend of lectures, discussions, and activities. The course will provide students with the skills to interact with diverse populations on issues related to food, nutrition and health.

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

List of specialized Elective Courses:

Specialized elective (2)

- **Functional Foods (CLN 352)**
  This course is designed to provide students with a comprehensive understanding of the concept of functional foods and their role in promoting health and preventing chronic diseases. This course explores the intersection of nutrition, food science, and health by examining the physiological and biochemical effects of functional foods on the human body.

- **Digital Skills and Multimedia in Dietetics and Health Practice (CLN 354)**
  This course is designed to equip students in the field of dietetics and health practices with the necessary knowledge and skills to effectively utilize digital tools and multimedia in their professional work. The course aims to explore the intersection of technology, digital media, and healthcare, and how these can be harnessed to improve patient care, health promotion, and education.

- **Nutritional Psychology (CL 356)**
  This course explores the relationship between nutrition and psychological well-being. It examines how food and nutrients can influence cognitive processes, emotions, behavior, and mental health. The course integrates knowledge from the fields of psychology, nutrition science, and behavioral sciences to provide a comprehensive understanding of the impact of food on psychological processes.

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

List of specialized Elective Courses:

Specialized elective (3)

- **Health Innovation (CLN 450)**
  Health sector is one of the most growing sectors globally. Especially with the integration of technology and innovation. This course works on introducing innovation and developing skills that will aid you in identifying innovative opportunities, implementing change and lead innovation strategies. The course will use brainstorming, group discussion, design, and critical thinking on real life projects to maximize benefits and application in health.

- **Feeding Children with Neurodevelopment Disorders (CLN 452)**
  This course provides students with a comprehensive understanding of various disabilities and conditions that can affect a child's ability to eat and drink. It covers the role of nutrition in attaining a better life for children with neurodevelopment disabilities and other cognitive disorders. It focuses on the causes of feeding difficulties and the therapeutic approaches to assess and complete nutritional management. It also provides strategies for managing the range of nutritional problems faced by children with neurodevelopmental disability.

- **Nutrigenomics (CL 454)**
  This course is designed to provide students with an in-depth understanding of the relationship between nutrition and genes. The course also describes how genetic makeup influences the body response to different nutrients and how diet, in turn, affects gene expression and overall health.

3. Part I: Students

3.2 Program Learning outcomes and Curriculum Structure

3.2.3 Courses Descriptions:

List of specialized Elective Courses:

Specialized elective (3)

- **Nutrition and Cancer (CLN 456)**
  This course aims to provide the students with comprehensive information about food carcinogens, anticancer dietary sources, and nutritional management for patients with different types of cancers who are undergoing different types of treatment modalities.

Information about the **General University** courses available here.

3.3 Scientific Research

The Clinical Nutrition Department is committed to fostering innovative research that challenges existing paradigms and explores new frontiers in nutrition. We aim to produce high-quality, impactful studies that set new standards in clinical nutrition. Our research encompasses a wide range of topics, focusing on how nutrition impacts clinical outcomes, metabolic health, and overall well-being.

Through graduation projects the department provide students with hands-on experience in research methodologies and clinical practice. Each project is designed to address a relevant issue in the field of nutrition. Through these projects, students contribute to the growing body of knowledge in clinical nutrition, gaining valuable skills in research design, data analysis, and evidence-based practice.

3.3.1 Examples of Previously published student's research

	Project title	Link to Publication
1	**Zaher, S**. A., AL-Subaihi, R., AL-Alshaya, A., AL-Saggaf, M., Al Amoudi, M. O., Babtain, H., & Neyaz, A. (2021). Pilot study to investigate enteral feeding practices and the incidence of underfeeding among mechanically ventilated critically ill patients at a specialist tertiary care hospital in Saudi Arabia. Journal of Parenteral and Enteral Nutrition, 45(6), 1327-1337.	Link
2	**Zaher, S.,** Sumairi, F. A., & Ajabnoor, S. M. (2024). Understanding nursing perspective towards barriers to the optimal delivery of enteral nutrition in intensive care settings. BMC nursing, 23(1), 42.	Link
3	**Mumena, W.** A., Ateek, A. A., Alamri, R. K., Alobaid, S. A., Alshallali, S. H., Afifi, S. Y., Aljohani, G. A., & Kutbi, H. A. (2022). Fast-Food Consumption, Dietary Quality, and Dietary Intake of Adolescents in Saudi Arabia. International journal of environmental research and public health, 19(22), 15083. https://doi.org/10.3390/ijerph192215083	Link
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3.4 Internship Year

The internship year is a mandatory twelve months of practical training in accredited health care facilities. It is intended to provide students with structured clinical experience through mutual supervision between the department and the health care training institute to fulfill the program learning outcomes. The main goal of the internship year is to apply the previously acquired knowledge and skills obtained during the courses in clinical settings.
The internship booklet is designed to outline the steps that need to be taken to ensure the success of the interns in the final stage prior to earning their bachelor's degree.

Please refer to the (Internship Booklet) for more information.

3.5 Graduation Requirements and Graduates Attributes

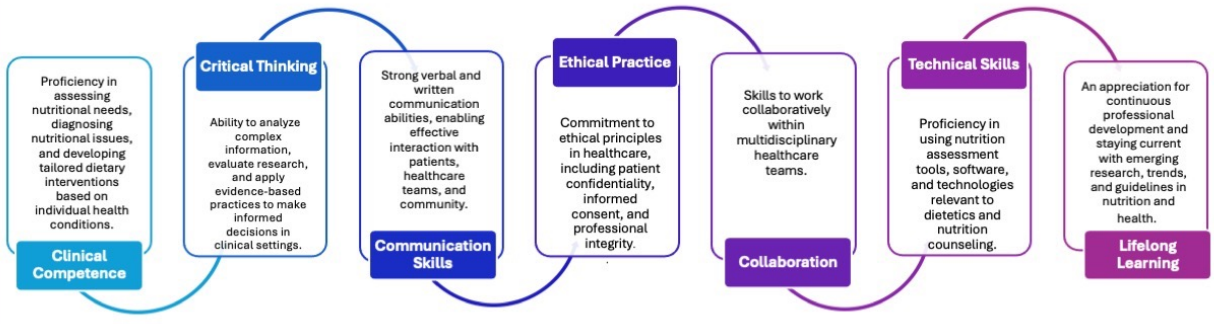
3.5.1 Graduation Requirements:

The BSc of Clinical Nutrition is a four-year program with an additional mandatory year for clinical training (Internship year). Students must successfully complete the total credit hour requirements (125 credit units) including university requirements (16 credit units), faculty requirement (8 credit units) and departmental requirements (101 credit units) and finish the internship training to get their degrees.

Following the Internship year, the students are granted the degree of Bachelor of Science in Clinical Nutrition & an internship completion certificate. The graduates will then need to apply to the Saudi Commission for Health Specialties to be awarded a certification of "Clinical Nutrition Specialist" after they pass the license exam.

3.5.2 Graduates Attributes:

Graduates of a clinical nutrition program typically develop a range of attributes that prepare them for effective practice in the field.



3.5.3 Career opportunities

Graduates in clinical nutrition have a diverse array of career opportunities, reflecting the growing demands of the crucial role nutrition plays in health and wellness allowing graduates to make a meaningful impact on individual and public health level

3. Part I: Students

3.5 Graduation Requirements and Graduates Attributes

3.5.3 Career opportunities

Here are some key career paths:

- **Clinical Dietitian:** Many graduates work in hospitals, clinics, or rehabilitation centers, providing nutritional assessments and developing personalized dietary plans for patients with various health conditions, such as diabetes, heart disease, or gastrointestinal disorders.
- **Community Nutritionist:** In this role, professionals focus on public health initiatives, educating communities about healthy eating, and developing programs that promote nutrition awareness, especially in underserved populations.
- **Researcher:** Those interested in the scientific aspect of nutrition can pursue research roles in universities, government agencies, or private industry, studying the effects of nutrition on health, disease prevention, and public health policy.
- **Sports Nutritionist:** With the rise of fitness and sports in Saudi Arabia, there's a demand for nutritionists who specialize in optimizing athletic performance through tailored nutrition plans for athletes at all levels.
- **Academia:** Professionals can work in educational settings, teaching future generations about clinical nutrition in Saudi universities.
- **Entrepreneurship:** Graduates may also choose to start their own businesses, such as meal prep services, nutrition apps, or health coaching practices, catering to the growing demand for personalized nutrition solutions.
- **Government and Nonprofit Organizations:** Positions in these sectors may involve developing nutritional guidelines, conducting community health assessments, or implementing food assistance programs e.g.: Saudi Food and Drug Authority & WHO.
- **Food Service Management:** Some graduates may find opportunities in managing food service operations in hospitals, schools, or corporate settings, ensuring that nutritional standards are met and promoting healthy menu choices.

3.6 Academic Policies and Regulations:

3.6.1 Study regulations

Academic regulations in the Department of Clinical Nutrition are typically compliant with the University academic regulations. It encompass several key areas including attendance policy, examination regulations and grading systems to ensure a structured and fair learning environment.

Course load:

The minimum course load for the main semester in the semester-based system is 12 credit hours, and the maximum is 19 credit hours. The maximum course load for the summer semester is 9 credit hours.

Registration:

- A student who successfully completes a semester will be registered for the following semester according to the approved study plan.
- A student who does not complete the semester will be registered for the minimum course load, at the very least.
- The academic advisor is allowed to complete the registration process by adding or dropping courses for the student according to the approved study plan.
- A student may complete their registration by adding or dropping courses in accordance with the requirements of each course, if it does not conflict with other courses and is completed within the timeline in the university calendar.
- The College Council, or who may delegate may allow exceptions for a prerequisite if necessary, following the guidelines set by the College Council.
- The College Council, or who may delegate may add one additional course beyond the maximum course load in cases of necessity.

Denied exam Entry:

A student is prohibited from taking the final exam in any course if their absence exceeds 25% of the theoretical, practical, or clinical sessions, as approved by the University Council for each course, whether conducted in-person, virtually, or through the different educational modes specified in the study plan.

3. Part I: Students

3.6 Academic Policies and Regulations:

3.6.1 Study regulations

Lifting the Prohibition:

The College Council, or its delegate, may allow the student to take the final exam, provided that the student submits an excuse accepted by the council or its delegate. The student's absence from lectures, practical lessons, or training sessions must not exceed 40% of the total contact hours for the course, whether conducted in-person, virtually, or according to the other educational modes specified in the approved course description in the study plan.

Submitting a Request to Lift the Prohibition:

- The student must submit a request to lift the prohibition to the Vice Dean for Academic Affairs before the final exams.
- The College Council, or its delegate, may accept the excuses submitted by the student, with the student's attendance being marked as "absent with an excuse" without affecting the prohibition percentage.

3. Part I: Students

3.6 Academic Policies and Regulations:

3.6.2 Exams Regulations:

- A student may sit for more than one exam in a single day, with a maximum of two exams.
- Course grades are recorded within a period not exceeding 48 hours from the date of the final exam.
- The duration of the written final exam must not be less than one hour and not exceed three hours.
- A student is not allowed to enter the final exam after the first 20 minutes have passed.
- A student is not allowed to leave the exam before half of the allotted time has passed.

Absence from the Final Exam:

If a student is unable to take the final exam, they are:

- Allowed to take a substitute exam if they submit a request for excuse acceptance within two weeks from the date of their absence from the final exam.
- The substitute exam must be held no later than the end of the next academic level.
- The student will be given the grade they earn in the substitute exam or a failing grade (F) if they do not take the substitute exam.

3. Part I: Students

3.6 Academic Policies and Regulations:

3.6.2 Exams Regulations:

Appeal on Final Grade for a Course:

A student has the right to appeal the final grade for a course within the following guidelines:

- The student must submit the appeal within a period not exceeding fifteen days from the approval of the result.
- If the student is not satisfied, another faculty member from the same discipline will be assigned to review the student's grades.
- If the student is still not satisfied, the appeal will be escalated to a three-member committee chaired by the college's vice dean for academic affairs and includes the department head and the course instructor. The committee's decision regarding the student's grade will be final.

More information about study and exam regulations is available here.

3.7 Academic Advising:

Upon admission to the department, each student is assigned an academic advisor. The role of the academic advisor is to help students and mange their academic and non- academic difficulties. Advisors conduct one-to-one meetings to discuss ongoing issues and are responsible for monitoring student progress, including follow-ups on absences, course withdrawals, academic warnings, and other academic situations. Academic advising plays a vital role in enhancing the overall quality of university life and is considered a shared responsibility between the advisor and the student.

More information about Academic Advising is available here.

3.8 Complaint:

3.8.1 Complaint Submission Steps:

- The student submits an official complaint using the student official e-mail.
- If the issue is academic, contact the academic advisor through official communication channels.
- If the academic advisor does not resolve the issue or if the issue is not academic, move to the next step.
- Contact the department head through official communication channels.
- If the issue remains unresolved, contact the College Vice Dean for Academic Affairs.

3.8.2 General Guidelines:

- Use the university email in all communications to ensure official and effective correspondence.
- Follow the administrative sequence mentioned in the process and do not skip any step.
- The student should wait for at least 24 hours to receive a response from the concerned party before moving to the next step.
- If no response is received within the specified time, the student can proceed to the next step.

3.9 Student's Advisory Counsel

The Student Advisory Council holds at least two sessions each academic semester. The Council Secretary is responsible for receiving the proposed topics from the members, compiling them, and preparing them for discussion during the session. The Council Secretary prepares the meeting agenda and sends it to the members at least one week before the meeting date.

3.9.1 Council Members

- Dean of the College (Chair)
- Vice Dean for Academic Affairs (Deputy Chair)
- Director of the Academic Advising Unit (Secretary)
- Vice Dean for Graduate Studies, Research, and Community Engagement (Member)
- Head of the Department of Clinical Nutrition (Member)
- Head of the Department of Clinical Laboratory Sciences (Member)
- Head of the Department of Diagnostic Radiology (Member)
- Student's representatives

3.9.2 Council Duties

- Convey students' suggestions and opinions to the Dean of the College.
- Inform students about their rights and responsibilities in the college through dedicated workshops.
- Represent college students in meetings and events related to academic issues of interest to students, whether within or outside the college.
- Address challenges faced by students and social issues within the university community.

3. Part I: Students

3.9 Student's Advisory Counsel

3.9.3 Student Nomination for Council Membership

Phase 1: Self-Nomination by Students

- Students interested in running for membership are required to fill out an electronic form that includes personal information, skills, relevant experiences, and the reason for wanting to join the Student Advisory Council.
- Interested students must submit their applications within one week from the date of the announcement.
- The Vice Dean's Office for Academic Affairs reviews the applications to ensure that all nominees meet the required criteria.

Phase 2: Student Nomination by Faculty Members

- Faculty members nominate students they deem suitable for membership in the Student Advisory Council based on: academic excellence, leadership skills and participation in student activities.
- Nominations are submitted electronically through an internal nomination form designated for faculty members.

Phase 3: Selection of Nominees

- Students who nominated themselves in Phase 1 and received a nomination from a faculty member in Phase 2 are selected.
- If the final number of nominees is greater than the required number, candidates are shortlisted based on the number of faculty nominations and their academic performance (GPA).
- If the final number of nominees is less than the required number, the Vice Dean's Office for Academic Affairs will reach out to the students nominated by faculty members and invite them to join the council, prioritizing students based on (GPA) until the required number is met.

3. Part I: Students

3.10 Student's rights and responsibilities:

3.10.1 Academic rights and responsibilities

Rights	Responsibilities
1. A supportive academic environment that ensures the ease of enrollment and study, with full access to all the educational facilities and resources available at the university.	1. Respect the teaching staff, employees, students, visitors, and company representatives contracted with the university
2. Access the academic materials and resources related to the courses they are enrolled in, as provided by the university's rules and regulations.	1. Commit to studying and fulfilling all academic requirements in accordance with the established rules and deadlines for starting classes, adding/dropping courses, and requesting deferments or withdrawals, as stipulated by the regulations and university bylaws.
3. Receive academic advising and guidance from their department or college regarding their course schedule and major, ensuring that their registration follows the university's academic calendar.	1. Adhere to the rules and policies concerning attendance, classroom regulations, and absences, except for approved reasons under university regulations.
4. Pre-register for courses and organize their schedule according to university guidelines. This allows them to choose their courses in a way that fits their academic goals, provided they meet the conditions set by the university.	1. Commit to integrity and honesty, avoiding any form of cheating or dishonesty during exams or any other academic activities.
5. Withdraw from or postpone their courses or semester, in line with the university's academic policies and calendar deadlines.	1. Follow the university's rules and regulations during exams, and refrain from using or attempting to use any personal devices or unauthorized materials in the exam room.
6. Have exam questions aligned with the course syllabus and its content, addressing the topics covered either directly or by reference, according to the course description.	1. Follow the guidance and instructions given by exam invigilators and faculty members during the exam period.
7. Request a review of their exam answers according to the rules and regulations set by the university, as well as the procedures for appeals and clarifications.	
8. Know the results of their research, exams, and final projects, including any corrections or approvals made after they have been graded.	

3.10 Student's rights and responsibilities:

3.10.1 Non-academic rights and responsibilities

Rights

1. Social care and support services provided by the university
2. Access healthcare services at university hospitals and health centers.
3. Benefit from university facilities such as housing, libraries, cafeterias, sports facilities, and parking.
4. Receive awards and scholarships based on academic merit, without discrimination.
5. Nomination for training courses, study programs, and internal and external trips related to academic and extracurricular activities.
6. Submit complaints regarding any perceived harm from faculty members or university staff, in accordance with the rules and regulations.
7. Appeal against any disciplinary decision made against them, according to the university's procedures.
8. Maintain confidentiality of their personal academic records, which should not be disclosed to anyone without their consent.

Responsibilities

1. Student must comply with the university's regulations, laws, and instructions, and the issued decisions and avoid any violations or manipulations.
2. Student must not submit any false or forged documents to obtain any privilege or right that contradicts the applicable rules and laws.
3. The university ID card must be shown when required by the university staff or teaching members upon request.
4. Students must respect university property, and refrain from tampering with buildings or equipment.
5. Students must follow guidelines for using university facilities and equipment and get prior approval to use them for purposes other than their intended use.
6. Students must follow dress codes, uphold Islamic values and university traditions, and avoid behavior that violates public decency and morals.
7. Students must respect public spaces, avoid unauthorized gatherings or disturbances.
8. Students must regularly monitor their university email and keep up with all official communications.

For more information about the student's rights and responsibilities please click **here**

3.11 Electronic Guides:

	Guide	Link to Guide
1	Rules of discipline and ethical behavior for students	Link
2	Student's Academic System Portal	Link
3	Interactive Student's Guide	Link
4	Blackboard Guide	Link
5	Tech Platform Guide	Link

4. Part II: Academic Staff

4.1 Introduction

According to Article 1 of the "Regulation Governing the Affairs of University Members and their Equivalents," issued by the Higher Education Council under Decision No. 4/6/1447, the term "faculty members" refers to:

- Professors.
- Associate Professors.
- Assistant Professors.

Article 2 of the same regulation states: “The provisions of this regulation also apply to lecturers, teaching assistants, language instructors, and research assistants.”

4.2 Responsibilities of Faculty Members Towards Students

Faculty members are responsible for diligently fulfilling their teaching duties, preparing and conducting their classes effectively, and interacting positively with students. The faculty members responsibilities toward their students include:

- Teaching the courses assigned within their official teaching load.
- Providing additional instruction beyond their official teaching load when necessary.
- Preparing the exams for their respective courses.
- Upholding the traditional academic values and instilling them in students.
- They should establish and strengthen direct communication with students and take care of their social, cultural, and athletic affairs.
- Faculty members record final exam grades, get department chair approval, and submits them to the academic system.
- Participating in preparing and developing academic plans and programs for the department.
- Supervising the practical or fieldwork requirements of the courses they teach.
- Supervising student’s graduation projects.

4.3 Responsibilities of Faculty Members Towards the University

Faculty members must avoid academic or professional behaviors that may harm the university's reputation or result in financial loss. The responsibilities of the faculty members toward the University include:

- Participating in department meetings, committees, and various college and university associations.
- Adhering to office hours and attending conferences.
- Submit proposals to relevant departments to improve academic and administrative work, along with implementation strategies.
- Actively participate in university activities that serve the community and suggest measures to the Vice President for Academic Development and Community Service.
- Propose seminars and conferences for cultural programs to earn community service points for promotion.
- Stay updated in their field, contribute to its development, report updates, and present relevant matters to the department council.
- Dedicate their working hours to teaching, research, advising, office hours, committees, community service, and other assigned duties.
- Teach assigned courses, follow class schedules, and coordinate any changes with the department head and the Deanship of Admissions and Registration.
- Follow the academic calendar and coordinate any changes to final exam dates with the department head and the Deanship of Admissions and Registration.
- Maintain continuous communication with the department head.
- Faculty members are dedicated to teaching, conducting research, supervising student projects, managing labs, and supporting libraries with resources .

4. Part II: Academic Staff

4.4 Usefull Guides

	Guide	Link to Guide
1	Rules of discipline and ethical behavior for students	Link
2	Staff Academic System Portal	Link
3	Academic Advisor Guide	Link
4	Study and Exams regulations Guide	Link
5	Blackboard Guide (Academic Staff)	Link
6	Tech Platform Guide	Link
7	VLAB	Link
8	Rasel	Link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