MASTER OF PHARMACEUTICAL SCIENCES

ASSESSMENT AND APPLICATIONS OF PHYTOTHERAPEUTIC DRUGS

HANDBOOK

Version 4

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INTRODUCTION

College of Pharmacy, Prince Sattam Bin Abdulaziz University is one of the recent scientific edifices that was approved in 1428 H. It was established to share with other Pharmacy Institutions in other Saudi Universities in preparing well qualified Pharmacist for the future. Qualified Pharmacists are expected to play a great role in reforming the Kingdom Health Care system.

The Department of Pharmacognosy is one of the most active Departments in the College in term of scientific research. The first Master Program in the College was approved in the Pharmacognosy Department. As the use of Traditional Medicine is highly trusted in the Kingdom as well as in the region, the wide spread of natural products in a well manufactured pharmaceutical forms in the Kingdom and worldwide made a huge increase in the use of natural products mainly from plant sources. In the Kingdom more than 1740 pharmaceutical products containing plant extracts are available on the market. Moreover, a lot of these products can be purchased online. The safety and efficacy of such products must be confirmed and closely monitored. To perform such a job successfully the preparation of a well-qualified Pharmacist with deep knowledge in the field of natural products is a must. This program “Master of Pharmaceutical Sciences/ Assessment and Applications of Phytotherapeutic Drugs” is one of the few offered programs that serve this crucial nationally required goal. The graduates will be prepared to have the capabilities to evaluate safety, efficacy and authenticity of market natural products.

1. MISSION, VISION, AND GOALS

Mission

This program aims to prepare distinguished graduates with a high degree of knowledge in the field of phytotherapy and phytopharmaceutical assessment that contribute effectively to academic environment, scientific research, and community needs.

Goals

- Preparing remarkable graduates with specialized qualifications and skills in the field of phytotherapeutic drugs to compete in the labor market.
- Developing research skills of graduates to produce impactful scientific research locally and internationally.
- Enhancing graduates' capacity to uphold ethical values, demonstrate social responsibility, and foster sustainable educational advancement.

Objectives

- Equipping students with in-depth knowledge to recognize and predict the composition, pharmacological properties, mechanisms of action, and therapeutic applications of phytotherapeutic drugs.
- Providing students with the skills to assess and evaluate the safety, efficacy, and quality of phytotherapeutic drugs.
- Supplying students with specialized qualifications and the skills to apply and assess herbal medicines and phytopharmaceuticals, thus enriching professional performance in all fields, including pharmaceutical and research fields.
- Enhancing students' research competencies, scientific writing abilities, commitment to lifelong learning, ethical practices, and social responsibility.
- Ensuring continuous enhancement of teaching and learning processes for optimal educational outcomes.

2. PROGRAM LEARNING OUTCOMES

In simpler terms, program learning outcomes (PLOs) are what students should know and be able to do after finishing their degree in this program. These include not just knowledge, but also practical skills and a grasp of important values and concepts. In this program our PLOs are as follows

Knowledge and Understanding:	
K1	Explain the advanced and specialized concepts, theories, and principles underlying the identification, standardization, biological evaluation, and therapeutic applications of phytomedicinal products.
K2	Discuss the recent developments and established research techniques related to the quality, safety, and efficacy of herbal drugs.
K3	Describe the specialized processes, practices, terminology, and legal and regulatory frameworks relevant to phytopharmaceuticals and professional phytotherapy practice.
Skills:	
S1	Develop evidence-based, creative solutions to complex problems in phytopharmaceutical sciences and phytotherapeutic practice.
S2	Conduct advanced research using specialized experimental, analytical, and evidence-based methodologies in phytopharmaceutical sciences.
S3	Apply advanced and specialized techniques in complex practical procedures for the assessment of the quality, safety, and efficacy of phytotherapeutic drugs and phytopharmaceuticals.
S4	Utilize advanced digital and ICT tools and applications to communicate research results and innovations in phytopharmaceutical sciences to specialist and non-specialist audiences and to support the analysis and interpretation of complex qualitative and quantitative data.
Values, Autonomy, and Responsibility:	
V1	Demonstrate integrity and professional, academic, ethical, legal, and safety values when addressing issues related to phytotherapy and phytopharmaceutical practice.
V2	Advocate the safe, effective, and responsible use of herbal drugs to improve the quality of life in society.
V3	Exhibit leadership, high autonomy, and responsibility in professional development, management of specialized tasks, monitoring of learning and performance, and effective participation in collaborative research and professional activities.

3. GRADUATES ATTRIBUTES

Graduate attributes refer to the skills, knowledge, and abilities of our graduates, beyond disciplinary content knowledge, that are applicable in a range of contexts in their lives.

In this Program, graduate's attributes are as follows:

- Demonstrate in-depth knowledge with a comprehensive understanding of the principles, theories, and practices related to phytotherapeutic drugs.
- Demonstrate research skills, including experimental design, literature reviews, analysis, interpretation of results, understanding of the ethical considerations related to phytotherapeutic drugs.
- Foster a commitment to lifelong learning and professional development by providing graduates with the skills and motivation to stay updated with the latest advancements in the field.
- Display experience in applying various analytical and laboratory techniques in the assessment of phytotherapeutic drugs, such as chromatography, spectroscopy, and bioassay methods for evaluating the potency and safety.
- Exhibit a deep understanding of the pharmacological and toxicological properties of phytotherapeutic drugs and evidence-based approaches enabling them to contribute effectively to the improvement of healthcare in the society.
- Develop critical thinking skills and problem-solving skills, allowing them to propose innovative solutions to challenges in the field.
- Show communication and presentation skills and capability to convey scientific information in both written and oral formats.
- Work effectively in multidisciplinary teams and show adaptability to new situations by collaborating with other researchers, healthcare professionals, and industry stakeholders.

4. IMPORTANCE OF THE PROGRAM

There are many benefits to taking a master's degree. While it requires discipline and stamina to complete, it strengthens skills that are important in daily life. These skills include critical thinking, analytic abilities, time management and presentation skills, all of which also helps you succeed in the workplace.

Importance of Our Program

- Prepare qualified National personnel in Phytotherapy and phytopharmaceutical assessment. There is a big problem in the Saudi Community due to the widespread use of Herbal products through impostors without any scientific background. Both College of Pharmacy at King Saud University and College of Pharmacy at King Abdulaziz University offer traditional Master's degree in Pharmacognosy dealing mainly with the subjects from pure academic point of view. This program is unique since it is more concerned with the practical application of Herbal products knowledge based on scientific evidence to better serve the community in this attractive area.
- Knowledge transfer and settlement of proper practice through the program graduates with their acquired specialized competencies in the management and development of application of Phytotherapy and standardization of Herbal products.
- The program seeks to develop students' skills in Phytotherapy and phytopharmaceutical assessment in terms of methods used to discover and develop pharmaceuticals from plant extracts, and also methods of analysis of pharmaceutical and natural products available in the market or abused substances using the most advanced devices.
- Enhance the scientific research and improve the skills of the students in Phytotherapy and phytopharmaceutical assessment through the Master program and to achieve systematic understanding of the knowledge and skills required in the health care applications.
- Add critical consciousness for better understanding about the current problems of Pharmacy and highlight new insights into the practice of pharmacy through the supervised and safe use of Herbal products.
- Comprehensive understanding of modern technologies and their application in the field of pharmacy using problem-solving skills and evaluation and research methods and data analysis.

- Study the safety of drugs extracted from natural sources, naturally derived pharmaceuticals and herbal products and evaluates their efficacy and contribution in the drug market in Saudi Arabia.
- Considering the inherited practice of Traditional medicine one of the important sources of knowledge and apply modern technology through research and investigation to verify its value and accumulate proper knowledge in pharmaceutical science.
- Continuous professional development of pharmaceutical science and integrate new skills in this field.

The Community needs for the Program:

- There is a great interest among Saudi citizens to acquire knowledge and use herbs and herbal products produced locally or imported elsewhere. The proposed program was designed to meet the community needs through well qualified personnel in this field.
- To establish qualified students in the field of administrative and technical consultancy that serves the health institutions in public and private sectors.
- The program aims to prepare qualified graduate students with great knowledge in Phytotherapy, phytopharmaceutical and their modern applications, contribute in educational, research and health institutes in public and private sectors to provide belter services.
- Participate in the strategic planning for better understanding and use of Phytotherapy and phytopharmaceutical assessment.
- Raising community awareness of the importance of medicinal plants in the discovery of new drug entities using the proper scientific approach.

5. PROGRAM STAKEHOLDERS

Stakeholders are individuals or groups internal or external to an organization who can positively or negatively influence a program. They expect positive results and can provide valuable input for the program. Stakeholders in our program as follows:

- Universities (Pharmacy colleges, Science, Agriculture) as academic and researchers.
- Research centers related to this field.
- Ministry of health.
- National center for Complementary and Alternative Medicine.
- Food and Drug Agency Saudi Arabia (SFDA).
- Anti-Narcotics Directorate of the Ministry of the Interior.
- Forensic Directorate - Ministry of health.
- Public Pharmacies and herbal shops.

Professions/jobs for which students are qualified:

- Qualified pharmacist in the field of natural products/ phytopharmaceuticals.
- Teaching assistant in Pharmacognosy Departments.

Relevant occupational / Professional sectors:

- Phytotherapist, herbal practitioner, medicinal and aromatic plants specialist, herbal industry, sales consultant for herbal company, blogger, research assistant in the field of natural products.

6. ADMISSION AND REGULATIONS

To be admitted to the program there is general requirements and department specific requirements. The students need to fulfill them all.

Generally, admissions to the post-graduate studies stipulate the following:

- The applicant must be a Saudi citizen or a non-Saudi with an official grant for post-graduate studies.
- The applicant must have degree of Bachelor of Science in pharmacy or Doctor of Pharmacy degree from Saudi university or any other recognized university.
- He must have a good reputation and conduct and must be physically fit.
- He should submit two letters of recommendations from professors who taught him before
- Should be entirely devoted to the study in the master phase.

Department specific requirements for admission are as follows:

In addition to the admission conditions stated in the unified regulation roles for graduate studies in Saudi universities (role 13), the applicant must:

- The applicant must graduate with a bachelor's degree in pharmacy from a recognized university.
- Obtain (4) in IELTS exam or any equivalent exam decided by the department before commencing the study in the program.
- Pass writing exam and a personal interview in accordance with the standards defined by the joint commission for the program.

Academic requirements

Credit hours serve a very important purpose in relation to how a student can track their progress towards earning the degree. In order to earn a master's degree from the college and the university, students typically need to earn a minimum number of credit hours as follows:

Academic requirement for the Degree			
Number of units of compulsory courses within the department	20	Number of units of elective courses within the department	4
Number of units of compulsory courses outside the department (if available)		Number of units of elective courses outside the department	
Total Number of units	**24**	**Total Number of units**	

Note: According to the rules of Graduate Studies the thesis/ dissertation option should not be less than 24 credits and without the thesis/ dissertation the option should be at least 42 credits.

7. CURRICULUM

The master curriculum is a guiding tool for planning the details of the education process, so that students can learn in an organized, orderly, and sequenced manner.

Curriculum structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Course	Required	11	20	66.7%
	Elective	2	4	13.3%
Graduation Project (if any)	--	--	--	--
Thesis (if any)	Thesis	1	6	20%
Field Experience (if any)	--	--	--	--
Others (.....)	--	--	--	--
Total		14	30	100%

Program Courses

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution,
Level 1	**PHG 611**	Herbal Drugs Macro- & Microscopical Analysis	Required	-	1+1	Program
	PHG 612	Phytomedicinal Products	Required	-	1+0	Program
	PHG 613	Production, Collection and Isolation of Herbal Medicines	Required	-	2+1	Program
	PHG 614	Phytotherapy I	Required	-	2+0	Program
Level 2	**PHG 621**	Phytotherapy II	Required	PHG 614	2+0	Program
	PHG 622	Quality Control of Phytopharmaceuticals	Required	PHG 611	1+1	Program

	PHG 623	Principles and Applications of Spectroscopic Techniques	Required	PHG 613	2+1	Program
	PHG 624	Herbal Drugs licensing and Regulations	Required	-	1+0	Program
Level 3	**PHG 631**	Biological Evaluation of Natural Products	Required	-	1+1	Program
	PHG 632	Seminar in Phytotherapy	Required	-	1+0	Program
	PHG 633	Toxicity and Safety of Herbal Medicine	Required	-	1+0	Program
	PHG XXX	Elective I	Elective	-	2+0	Program
	PHG XXX	Elective II	Elective	-	2+0	Program
Level 4	**PHG 699**	Thesis	Required		0+6	Program

Elective courses for level 3 (Third semester):

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution,
Level 3	**PHG 634**	Microbial Biotransformation & Tissue Culture	Elective	-	2+0	Program
	PHG 635	Aromatherapy	Elective	-	2+0	Program
	PHG 636	Phytocosmeceuticals	Elective	-	2+0	Program
	PHG 637	Alternative & Complementary Medicine	Elective	-	2+0	Program
	PHG 638	Herb-Drug Interactions	Elective	-	2+0	Program
	PHG 639	Forensic Pharmacognosy	Elective	-	2+0	Program

Course Specifications

A hyperlink for all course specifications using NCAAA template (T-104)

REQUIREMENTS FOR THE DEGREES

Study Plan

Name of Degree Awarded	Master of Pharmaceutical Sciences/ Assessment and Applications of Phytotherapeutic Drugs

First Semester				
No	Course Code	Course Name	Number of Unites	
			Contact Hours	Credit Hours
1	PHG 611	Herbal Drugs Macro- & Microscopical Analysis	(1,0,1)	**2**
2	PHG 612	Phytomedicinal Products	(1,0,0)	**1**
3	PHG 613	Production, collection and isolation of herbal medicines	(2,0,1)	**3**
4	PHG 614	Phytotherapy I	(2,0,0)	**2**
Total Units			**(6,0,2)**	**8**

Second Semester			
No		Course Name	Number of Unites

	Course Code		Contact Hours	Credit Hours
1	PHG 621	Phytotherapy II	(2,0,0)	2
2	PHG 622	Quality Control of Phytopharmaceuticals	(1,0,1)	2
3	PHG 623	Principles and Applications of Spectroscopic Techniques	(2,0,1)	3
4	PHG 624	Herbal Drugs licensing and Regulations	(1,0,0)	1
Total Units			(6,0,2)	**8**

Third Semester				
No	Course Code	Course Name	Number of Unites	
			Contact Hours	Credit Hours
1	PHG 631	Biological Evaluation of Natural Products	(1,0,1)	2
2	PHG 632	Seminar in Phytotherapy	(1,0,0)	1
3	PHG 633	Toxicity and Safety of Herbal Medicine	(1,0,0)	1
4	PHG xxx	Elective Course	(2,0,0)	2
5	PHG xxx	Elective Course	(2,0,0)	2
Total Units			(7,0,1)	8

Fourth Semester				
No	Course Code	Course Name	Number of Unites	
			Contact Hours	Credit Hours
1	PHG 699	Thesis	(6,0,0)	6
Total Units			(6,0,0)	6

Elective Courses

Credit	Units	Course Name	Course Code
2	(2,0,0)	PHG 634	Microbial Biotransformation& Tissue Culture
2	(2,0,0)	PHG 635	Aromatherapy
2	(2,0,0)	PHG 636	Phytocosmeceuticals
2	(2,0,0)	PHG 637	Alternative & Complementary Medicine
2	(2,0,0)	PHG 638	Herb-Drug Interactions

2	(2,0,0)	PHG 639	Forensic Pharmacognosy

COURSES DESCRIPTIONS

Herbal Drugs Macro- & Microscopical Analysis	
Course Code:	**PHG 611**
Credit hours:	**1+1**
Level/year at which this course is offered:	**1st Level; 1st Year**

This course aims to establish advanced graduate foundations in plant taxonomy and systematic classification as a basis for the accurate identification and authentication of medicinal plants. It establishes basic principles of the macroscopic and microscopic characteristics of various plant organs, such as roots, leaves, flowers, and seeds. Students are introduced to high-level qualitative microscopy to identify powdered materials, focusing systematically on major therapeutic species used within Saudi Arabia, including Chamomile, Senna, Olive leaves, Black seed, Garden Cress, and Costus.

Phytomedicinal Products	
Course Code:	**PHG 612**
Credit hours:	**1+0**
Level/year at which this course is offered:	**1st Level; 1st Year**

This course establishes a comprehensive theoretical background regarding the bioactive secondary metabolites of medicinal plants used in the therapeutic management of systemic diseases. It outlines the biosynthesis, chemical structures, and quantitation of major phytochemical classes, their biological activities and therapeutic usage areas. Students are introduced to pharmacodynamic principles, dosages, side effects, and contraindications of clinical phytomedicinal products, analyzing established therapeutic agents, such as *Taxol, Silymarin, and Diosmin* as pharmaceutical models.

Production, Collection and Isolation of Herbal Medicines	
Course Code:	**PHG 613**
Credit hours:	**2+1**
Level/year at which this course is offered:	**1st Level; 1st Year**

This course covers the advanced methodologies applied to production, sustainable collection, authentication, purification, separation, and isolation of natural products after extraction. It outlines advanced chemical and physical extraction and purification systems based on boiling points, solubility parameters, and acid-base characteristics. Chromatographic systems are explored in post-graduate depth; the course introduces specialized applications of column chromatography under positive and negative pressures, thin-layer chromatography (TLC), and the strategic selection of stationary phases based on molecular characteristics. Furthermore, the course establishes the principles of qualitative and quantitative chromatography, providing practical, source-grounded examples of purity verification, exhaustion testing, and adulteration detection using the World Health Organization (WHO) monographs and internationally recognized Pharmacopoeias.

Phytotherapy I	
Course Code:	**PHG 614**
Credit hours:	**2+0**
Level/year at which this course is offered:	**1st Level; 1st Year**

This course provides students with fundamental concepts and clinical principles for utilizing evidence-based phytotherapeutic drugs to manage acute and chronic health disorders. It outlines the basic pharmacological properties, mechanisms of action, clinical indications, benefits, and safety considerations of herbal medicines. Focus is placed on establishing foundational knowledge of phytotherapeutic agents targeting the central nervous, respiratory, urinary, digestive, and female reproductive (gynecology) systems to prepare students for professional clinical consultation.

Phytotherapy II	
Course Code:	**PHG 621**
Credit hours:	**2+0**
Level/year at which this course is offered:	**2nd Level; 1st Year**
This course builds upon foundational phytotherapy to practice the clinical application of medicinal plants and natural products in the therapeutic management of cardiovascular, hepatobiliary, dermatological, metabolic (obesity), and immunological disorders. It covers official names, synonyms, natural sources, and bioactive chemical components to characterize their precise mechanisms of action and design evidence-based therapies. Furthermore, the course emphasizes assessment of clinical indications, proper dosing regimens, commercially available dosage forms in the market, precautions, adverse reactions, contraindications, and potential herb-herb and herb-drug interactions to support safe and rational clinical decision-making.	

Quality Control of Phytopharmaceuticals	
Course Code:	**PHG 622**
Credit hours:	**1+1**
Level/year at which this course is offered:	**2nd Level; 1st Year**
This course covers the principles and practical methodologies for evaluating medicinal herbal products in accordance with global and national regulatory standards. Students will learn to interpret pharmacopoeial monographs, such as the the American (USP), European (EP), British (BP), and British Herbal Pharmacopoeias (BHP), to evaluate herbal drugs, and perform fundamental quality control assessments, including physicochemical testing, extraction, distillation, and spectroscopic profiling using UV, IR, and atomic absorption spectroscopic techniques. Emphasis is placed on modern hyphenated chromatographic tools, including High-Performance Thin-Layer Chromatography (HPTLC), HPLC-UV, HPLC-MS, and GC-MS, to develop diagnostic chemical fingerprints, assure product purity, and detect adulteration in compliance with Saudi Food and Drug Authority (SFDA) regulations.	

Principles and Applications of Spectroscopic Techniques	
Course Code:	**PHG 623**
Credit hours:	**2+1**
Level/year at which this course is offered:	**2nd Level; 1st Year**

This practical course focuses on practicing the interpretative application of integrated spectroscopic methods to solve the structural elucidation of diverse bioactive natural products mainly obtained from plant sources. Students actively evaluate and interpret multi-dimensional electromagnetic spectral data, practicing functional group identification via IR spectroscopy, and flavonoid characterization via UV-Vis spectroscopy using various shift reagents. The course emphasizes practicing the analysis of molecular weight and fragmentation patterns using both low- and high-resolution Mass Spectrometry (MS). Extensive training is provided to practice the interpretation of 1D and 2D Nuclear Magnetic Resonance (NMR) experiments, including homonuclear and heteronuclear correlation techniques. Furthermore, students will study the diagnostic roles of optical rotation and X-ray crystallography in differentiating between natural isomers that are essential for medical applications.

Herbal Drugs Licensing and Regulations	
Course Code:	**PHG 624**
Credit hours:	**1+0**
Level/year at which this course is offered:	**2nd Level; 1st Year**

This course equips students with comprehensive knowledge and skills in regulatory affairs, licensing processes, and compliance pathways for herbal medicines, phytopharmaceuticals, and dietary supplements both in Saudi Arabia and globally. Students will analyze legal definitions, regulatory classifications, and standardization laws governing natural products. The curriculum focuses on the compilation and evaluation of registration dossiers, aligning submission requirements with guidelines from the Saudi Food and Drug Authority (SFDA), the European Scientific Cooperative on Phytotherapy (ESCOP), and World Health Organization (WHO) monographs. Emphasis is placed on interpreting national legislative frameworks, quality control mandates, and updated Royal Orders published in the official gazette (*Umm Al-Qura*) to ensure full legal and safety compliance.

Biological Evaluation of Natural Products	
Course Code:	**PHG 631**

Credit hours:	**1+1**
Level/year at which this course is offered:	**3nd Level; 2nd year**

This course provides advanced theoretical knowledge and practical skills on the principles, design, and practical applications of biological assays used to discover, evaluate, and characterize bioactive natural products. Students explore target-specific screening methodologies, from fundamental bioassay-guided isolation to enzyme inhibition, receptor-functional assays, and high-throughput screening (HTS) formats, to direct chromatographic purification toward active therapeutic constituents and elucidate their molecular mechanisms of action. The course covers *in vitro* microbiological assays for antibacterial, antifungal, and antiviral discovery, alongside primary mammalian cell culture models for preclinical anticancer evaluation. Additionally, students examine *ex vivo* isolated organ preparations for antispasmodic and vasoactive bioassays, as well as *in vivo* experimental models for assessing anti-inflammatory, analgesic, antidiabetic, and gastric mucosal protective properties.

Seminar in Phytotherapy

Course Code:	**PHG 632**
Credit hours:	**1+0**
Level/year at which this course is offered:	**3nd Level; 2nd year**

This course serves as an advanced research forum where students master advanced scientific writing, reference management, and database retrieval to critically evaluate and present current trends in phytotherapy and phytopharmaceuticals. Through weekly journal clubs and round-table discussions, students systematically analyze recent literature retrieved from major databases, such as PubMed, Scopus, and Web of Science. During this course, all registered students will give a one-hour presentation on an assigned topic, and he must satisfactorily address any questions from the audience. Emphasis is placed on research integrity, ethical citation, and drafting structured scientific writing.

Toxicity and Safety of Herbal Medicine

Course Code:	**PHG 633**
Credit hours:	**1+0**
Level/year at which this course is offered:	**3nd Level; 2nd year**

This course prepares students to systematically evaluate the safety, toxicity, and clinical risk profiles of herbal medicines and natural products. The course provides a comprehensive foundation in toxicological principles, including dose-response relationships, ADME toxicokinetics, and cellular/molecular mechanisms such as oxidative stress and genotoxicity. Students study naturally occurring toxic constituents across plant families, environmental contaminants (heavy metals, pesticides, mycotoxins), and analyze organ-specific toxicities, including gastrointestinal, hepatic, cardiovascular, neurological, dermal, and reproductive hazards. Students interpret preclinical safety data, clinical case studies, and global pharmacovigilance frameworks to formulate risk-mitigation strategies and effectively communicate evidence-based safety information to healthcare professionals and the public.

Elective courses

Microbial Biotransformation and Tissue Culture	
Course Code:	PHG 634
Credit hours:	2+0
Level/year at which this course is offered:	3nd Level; 2nd year

This elective course provides advanced insights into biotechnological, biocatalytic, and fermentation technologies, focusing on the production, optimization, and structural modification of bioactive natural products. Students explore biotransformation mechanisms using natural or recombinant microorganisms, isolated enzymes, and whole-cell systems to execute site-specific chemical reactions (such as oxidation, reduction, hydrolysis, and decarboxylation) that enhance compound efficacy and safety. Additionally, the curriculum compares microbial biotransformation pathways with mammalian metabolic models to predict drug metabolism, therapeutic efficacy, and toxicity profiles. The course further examines advanced biopharmaceutical applications, including gene therapy, monoclonal antibodies, protoplast culture, and micropropagation as sustainable alternatives to chemical synthesis for scaling high-value secondary metabolites.

Aromatherapy	
Course Code:	PHG 635
Credit hours:	2+0
Level/year at which this course is offered:	3nd Level; 2nd year

The aim of this elective course is to provide in-depth insights into aromatherapy as a complementary and alternative modality that utilizes essential oils to promote physical and psychological well-being. The curriculum explores the historical applications of aromatherapy, essential oil extraction techniques, and methods of administration. Students examine the chemical profiles and active constituents of key aromatic plants, evaluating their clinical effects through a body-systems approach supported by current research evidence. Additionally, the course addresses safety considerations, including contraindications and toxicity, alongside essential oil quality control, standardization, preservation, and storage protocols.

Phytocosmeceuticals	
Course Code:	**PHG 636**
Credit hours:	**2+0**
Level/year at which this course is offered:	**3nd Level; 2nd year**

This course provides comprehensive knowledge to enable students to deliver professional pharmaceutical services and evidence-based consultations in phytocosmeceuticals. Students explore the core principles of phytocosmetology, including the identification of medicinal plants and marine organisms used in cosmetic formulations. The curriculum covers methods of preparation, formulation techniques, and quality evaluation for a wide array of natural cosmetic products, including skin, hair, and body care preparations, sunscreens, perfumery, antioxidants, anti-aging therapies, and weight management agents. Through real-world examples, such as marine-derived exopolysaccharides (e.g., Abyssine) used to soothe and protect sensitive skin against chemical, mechanical, and UV-induced irritation, students learn to critically evaluate safety, efficacy, and application in professional practice.

Alternative and Complementary Medicine	
Course Code:	**PHG 637**
Credit hours:	**2+0**
Level/year at which this course is offered:	**3nd Level; 2nd year**

The course equips students with the scientific, clinical, and regulatory frameworks needed to evaluate complementary and alternative medicine (CAM) systems. The course addresses traditional medical systems (such as Ayurveda, Traditional Chinese Medicine, Korean Medicine, Campo Medicine, Arabic & Islamic Tradition Medicine, and Prophetic Medicine) alongside modalities like acupuncture, homeopathy, mind-body therapies, and energy medicine. It focuses on critically appraising clinical evidence, evaluating efficacy and safety in chronic disease and pain management, and navigating global regulatory frameworks to ensure evidence-based and safe practice.

Herb-Drug Interactions	
Course Code:	**PHG 638**
Credit hours:	**2+0**
Level/year at which this course is offered:	**3nd Level; 2nd year**

This course provides comprehensive theoretical knowledge and skills about herb-drug or dietary supplements-food interactions and their clinical significance as well as the application of that knowledge to minimize the risk and outcome of interactions. The main aim of this course is to offer theoretical information about the interactions between herbal drugs and conventional drugs. The course will provide recent literature and case reports concerning the herb-drug interactions. It covers different types of drug interaction including herbal interactions, pharmacokinetic interactions, pharmacodynamics interactions, alcohol and smoking drug interactions, CNS drug interactions, interactions of cardiovascular acting drugs, interactions of anticoagulants, interactions of antimicrobials, interactions of hormones, and drug-disease interactions. Further, the responsibility of the pharmacist for avoiding these interactions will also be discussed in detail.

Forensic Pharmacognosy	
Course Code:	PHG 639
Credit hours:	2+0
Level/year at which this course is offered:	3nd Level; 2nd year

This elective course provides in-depth knowledge on the forensic assessment, scientific identification, and toxicological evaluation of poisonous plants and natural substances of abuse. Students critically appraise the chemical profiles, active constituents, and biological mechanisms of lethal phytotoxins implicated in forensic investigations, specifically focusing on cases of assassination, homicide, and suicide attempts. Students evaluate the pharmacodynamics, post-mortem detection limits, and diagnostic tools and analytical techniques required to identify illicit natural drugs of abuse and characterize their exact chemical composition.

Thesis	
Course Code:	PHG 699
Credit hours:	0+6
Level/year at which this course is offered:	4th Level; 2nd year

The thesis represents the culmination of the Master of Pharmaceutical Sciences program, emphasizing independent research in the field of phytopharmaceutical sciences. Under faculty supervision, students design, execute, and present a research project involving the isolation, standardization, biological evaluation, or analytical characterization of phytotherapeutic drugs. The thesis develops advanced skills in critical thinking, data analysis, scientific writing, and presentation, while reinforcing ethical and professional research conduct.

Students Assessment Activities

Courses with Practical hours

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Major Exam	Week 9-10	20 %
2.	Practical	continuous	25%
3.	Quizzes, Homework, presentation, group discussion	continuous	15 %
4.	Final Exam	Week 18	40 %

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

Theoretical Courses

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Major Exam	Week 9-10	30 %
2.	Quizzes, Homework, presentation, group discussion	continuous	20 %
3.	Final Exam	Week 18	50 %

Appendix

تعريفات خاصة بشؤون الدراسة والاختبارات

Definitions for study and exam matters

(حسب مواد لائحة الدراسة والاختبارات للمرحلة الجامعية والقواعد التنفيذية المعتمدة من مجلس جامعة الامير سطام بن عبدالعزيز)

(According to the articles of the study and examination regulations for the university stage and the executive rules approved by the Council of Prince Sattam bin Abdulaziz University)

Study system: Study proceeds according to the level system, and the duration of the study level is a semester of no less than (15) weeks, not including registration periods and final exams. Study schedules are ready before the start of study. The student progresses in studying and succeeding in the courses of the academic levels according to the provisions for moving from one level to another.	**نظام الدراسة:** تسير الدراسة على نظام المستويات وتكون مدة المستوى الدراسي فصلا دراسيا مدته لا تقل عن (15) أسبوعا، ولا تدخل من ضمنها فترات التسجيل والاختبارات النهائية وتكون الجداول الدراسية جاهزة قبل موعد بدء الدراسة. يتدرج الطالب في الدراسة والنجاح في مقررات المستويات الدراسية وفقا لأحكام الانتقال من مستوى إلى آخر.
Academic year: two main semesters and a summer semester if available.	**السنة الدراسية:** فصلان رئيسان وفصل صيفي إن وجد.
Summer semester: A period of time not exceeding (8) weeks, excluding registration periods and final exams, during which the number of weekly hours allocated to studying each course will be doubled.	**الفصل الدراسي الصيفي:** مدة زمنية لا تزيد على (8) أسابيع ولا تدخل من ضمنها فترات التسجيل والاختبارات النهائية، وتضاعف خلالها عدد الساعات الأسبوعية المخصصة لدراسة كل مقرر.
Academic level: It indicates the academic stage, and the number of levels required for graduation is four levels or more according to the approved study plans.	**المستوى الدراسي:** هو الدال على المرحلة الدراسية، ويكون عدد المستويات اللازمة للتخرج أربعة مستويات أو أكثر وفقا للخطط الدراسية المعتمدة.
Course: A study subject that follows a specific level within the approved study plan in each major (program). Each course has a name, number, symbol, and a detailed	**المقرر الدراسي:** مادة دراسية تتبع مستوى محدداً ضمن خطة الدراسة المعتمدة في كل تخصص (برنامج). ويكون لكل مقرر اسم

description of its vocabulary that distinguishes it in terms of content and level from other courses, and a special file maintained by the department for the purpose of follow-up, evaluation, and development. Some courses may have a prerequisite or concurrent requirement.	ورقم ورمز ووصف مفصل لمفرداته يمّيزه من حيث المحتوى والمستوى عمّا سواه من مقررات دراسية، وملف خاص يحتفظ به القسم لغرض المتابعة والتقييم والتطوير. ويجوز أن يكون لبعض المقررات الدراسية متطلب أو متطلبات سابقة أو متزامنة معه.
Study unit: The weekly theoretical lecture, which is no less than fifty minutes long, or the practical or field lesson, which is no less than one hundred minutes long, or the clinical lesson, which is no less than fifty minutes long.	**الوحدة الدراسية:** المحاضرة النظرية الأسبوعية التي لا تقل مدتها عن خمسين دقيقة، أو الدرس العملي أو الميداني الذي لا تقل مدته عن مائة دقيقة، أو الدرس السريري الذي لا تقل مدته عن خمسين دقيقة.
Minimum study load: The minimum number of study units that a student must register in proportion to his cumulative average, according to what is decided by the University Council.	**الحد الأدنى من العبء الدراسي:** أقل عدد من الوحدات الدراسية التي ينبغي على الطالب تسجيلها بما يتناسب مع معدّله التراكمي وفقاً لما يقرره مجلس الجامعة.
The student's academic record: A statement that explains the student's academic progress, and includes the courses he takes in each semester, with their symbols and numbers, the number of academic units assigned, the grades he obtained, and the symbols and values of those grades. The student's academic record also shows the semester average, cumulative average, and general grade statement. All courses that he previously studied and was exempted from are also recorded in the academic record of the transferred student, and they are not included in calculating his cumulative average.	**السجل الأكاديمي للطالب:** بيان يوضح سير الطالب الدراسي، ويشمل المقررات التي يدرسها في كل فصل دراسي برموزها وأرقامها وعدد وحداتها الدراسية المقررة والتقديرات التي حصل عليها ورموز وقيم تلك التقديرات، كما يوضح السجل الأكاديمي للطالب المعدل الفصلي والمعدل التراكمي وبيان التقدير العام. كما يثبت أيضا في السجل الأكاديمي للطالب المحول جميع المقررات التي سبق له دراستها وأعفي منها، ولا تدخل في احتساب معدله التراكمي.
Academic Warning: The notice given to a student due to his cumulative GPA falling below the stipulated minimum.	**الإنذار الأكاديمي:** الإشعار الذي يوجه للطالب بسبب انخفاض معدله التراكمي عن الحد الأدنى المنصوص عليه.
Semester work grade: The grade awarded for work that shows the student's achievement during a semester of tests, research, and educational activities related to the course. Based on the Department Council's proposal, the College Council determines a grade for the semester work between (40%) and (60%) of the final grade for the course. The grade for the course's	**درجة الأعمال الفصلية:** الدرجة الممنوحة للأعمال التي تبين تحصيل الطالب خلال فصل دراسي من اختبارات وبحوث وأنشطة تعليمية تتصل بالمقرر الدراسي. ويحدد مجلس الكلية بناءً على اقتراح مجلس القسم درجة للأعمال الفصلية ما بين (40 %)

semester work is calculated in one of the following two ways: 1. Oral exams, practical exams, research, or other types of classroom activity, all or some of them, and at least one written exam. 2. At least two written tests.	إلى (60 %) من الدرجة النهائية للمقرر. وتحتسب درجة الأعمال الفصلية للمقرر بإحدى الطريقتين الآتيتين: 1. الاختبارات الشفهية، أو العملية أو البحوث أو أنواع النشاط الصفي الأخرى أو منها جميعاً أو من بعضها واختبار تحريري واحد على الأقل. **2.** اختبارين تحريريان على الأقل.
Final exam: An in-course exam held once at the end of the semester.	**الاختبار النهائي:** اختبار في المقرر يعقد مرة واحدة في نهاية الفصل الدراسي.
Final exam grade: The grade that the student obtains in each course in the final exam of the semester.	**درجة الاختبار النهائي:** الدرجة التي يحصل عليها الطالب في كل مقرر في الاختبار النهائي للفصل الدراسي.
Absenteeism from the final exam: A student who is absent from the final exam will have a grade of zero in that exam, and his grade in that course will be calculated on the basis of the grades for the semester work he obtained. If the student is unable to attend the final exam in any of the semester courses due to a compelling excuse, the College Council may - in cases of extreme necessity - accept his excuse and allow him to be given an alternative exam within a period not exceeding the end of the following semester, and the grade he obtains after taking the alternative exam will be given.	**التغيب عن الاختبار النهائي:** الطالب الذي يتغيب عن الاختبار النهائي تكون درجته صفراً في ذلك الاختبار، ويحسب تقديره في ذلك المقرر على أساس درجات الأعمال الفصلية التي حصل عليها. وإذا لم يتمكن الطالب من حضور الاختبار النهائي في أي من مقررات الفصل لعذر قهري جاز لمجلس الكلية - في حالات الضرورة القصوى - قبول عذره والسماح بإعطائه اختباراً بديلاً خلال مدة لا تتجاوز نهاية الفصل الدراسي التالي، ويعطى التقدير الذي يحصل عليه بعد أدائه الاختبار البديل.
Final testing procedures: 1- It is not permissible for a student to be tested in more than two courses in one day, and the University Council may make an exception to this. 2- The student is not allowed to take the test after half an hour from its start, and he is not allowed to leave the test before half an hour from its start. 3- Cheating in the test, attempting it, or violating the instructions and rules for conducting the test are matters for which the student will be punished according to the student disciplinary regulations issued by the University Council.	**إجراءات الاختبار النهائي:** **1-** لا يجوز اختبار الطالب في أكثر من مقررين في يوم واحد، ولمجلس الجامعة الإستثناء من ذلك. **2-** لا يسمح للطالب بدخول الاختبار بعد مضي نصف ساعة من بدايته، كما لا يسمح له بالخروج من الاختبار قبل مضي نصف ساعة من بدايته. **3-** الغش في الاختبار أو الشروع فيه أو مخالفة التعليمات وقواعد إجراء الاختبار أمور يعاقب عليها الطالب وفق لائحة تأديب الطلاب التي يصدرها مجلس الجامعة.

4- The council of the college that is teaching the course may - in cases of necessity - approve the re-correction of the answer sheets within a period not exceeding the beginning of the next semester's exams.	**4-** لمجلس الكلية التي تتولى تدريس المقرر - في حالات الضرورة - الموافقة على إعادة تصحيح أوراق الإجابة خلال فترة لا تتعدى بداية اختبارات الفصل الدراسي التالي.
Controls for re-correcting test answer sheets: 1- The student may submit a request to re-correct the answer sheets to the department that teaches the course and then submit the request to the College Council, provided that submitting the request does not exceed one month from the end of the final exam period for the semester in which the student wishes to review the answer sheets for one of his courses. 2- The student must not have previously submitted a request to re-correct the answer sheets for one of the tests and his request was proven to be invalid. 3- The student may not submit a request to re-correct the answer sheets of more than one course per semester. 4- A form is prepared that includes the data mentioned in paragraphs (1, 2, and 3) in addition to other data that includes (the student's name, university number, course number, code and name, division number, semester, absence percentage, cumulative average, warnings, name of the course instructor, and date The test, justifications for requesting re-correction, and a pledge from the student that the information he provided is correct. 5- In the event that re-correction is approved, the College Council shall form a committee consisting of at least three faculty members to re-correct the answer sheets. The committee shall submit a report thereon to the College Council for consideration, and the Council's opinion shall be considered final.	**ضوابط إعادة تصحيح أوراق إجابات الاختبارات:** **1-** يجوز أن يتقدم الطالب بطلب إعادة تصحيح أوراق الإجابة إلى القسم الذي يدرس المقرر ثم يرفع الطلب إلى مجلس الكلية على ألا يتجاوز تقديم الطلب شهرا من نهاية فترة الاختبارات النهائية للفصل الذي يرغب الطالب مراجعة أوراق إجابة أحد مقرراته. **2-** ألا يكون الطالب قد سبق أن تقدم بطلب إعادة تصحيح أوراق إجابة أحد الاختبارات وثبت عدم صحة طلبه. **3-** لا يجوز أن يتقدم الطالب بطلب إعادة تصحيح أوراق إجابة أكثر من مقرر واحد في الفصل الدراسي. **4-** تعد إستمارة تتضمن البيانات الواردة في الفقرات (1 و2 و3) بالإضافة إلى بيانات أخرى تشمل (اسم الطالب، ورقمه الجامعي، ورقم المقرر ورمزه واسمه، ورقم الشعبة، والفصل الدراسي، ونسبة الغياب، والمعدل التراكمي، والإنذارات، واسم مدرس المقرر، وتاريخ الاختبار، ومبررات طلب إعادة التصحيح، وتعهد من الطالب بصحة المعلومات التي قدمها). **5-** في حالة الموافقة على إعادة التصحيح، يشكل مجلس الكلية لجنة تتكون من ثلاثة أعضاء هيئة تدريس على الأقل لإعادة تصحيح أوراق الإجابة وترفع اللجنة تقريرا بذلك لمجلس الكلية للبث فيه، ويعتبر رأي المجلس نهائيا.
Final mark: The sum of semester work grades plus the final exam grade for each course. The grade is calculated out of one hundred.	**الدرجة النهائية:** مجموع درجات الأعمال الفصلية مضافا إليها درجة الاختبار النهائي لكل مقرر، وتحسب الدرجة من مائة.

Grade: A description of the percentage or alphabetical code of the final grade obtained by the student in any course.	**التقدير:** وصف للنسبة المئوية أو الرمز الأبجدي للدرجة النهائية التي حصل عليها الطالب في أي مقرر.
Incomplete grade: A grade assigned temporarily for each course for which the student is unable to complete the requirements on the specified date and is symbolized in the academic record by the letter (L) or (IC) after the approval of the department council that is teaching the course based on the recommendation of the course instructor allowing the student to complete those requirements in The following semester, only the grade that the student obtains after completing the requirements for that course is counted toward the semester or cumulative average. If one semester has passed and the incomplete grade in the student's academic record has not changed due to lack of completion, it is replaced with a failing grade (E) or (F) and it is calculated. Within the semester and cumulative average.	**تقدير غير مكتمل:** تقدير يرصد مؤقتا لكل مقرر يتعذر على الطالب استكمال متطلباته في الموعد المحدد ويرمز له في السجل الأكاديمي بالحرف (ل) أو (IC) وذلك بعد موافقة مجلس القسم الذي يتولى تدريس المقرر بناءً على توصية مدرس المقرر السماح للطالب باستكمال تلك المتطلبات في الفصل الدراسي التالي ولا يحسب ضمن المعدل الفصلي أو التراكمي إلا التقدير الذي يحصل عليه الطالب بعد استكمال متطلبات ذلك المقرر، وإذا مضى فصل دراسي واحد ولم يتغير تقدير غير مكتمل في السجل الأكاديمي للطالب لعدم استكماله فيستبدل به تقدير راسب (هـ) أو (F) ويحسب ضمن المعدل الفصلي والتراكمي.
Continuing grade: A grade allocated temporarily for each course whose nature requires studying in more than one semester to complete it and is symbolized in the academic record by the letter (M) or (IP). After the student finishes studying the course, he is awarded the grade he obtained. If he does not complete the course on time, the department council that is teaching the course may agree to record an incomplete grade (L) or (IC) in the student's academic record.	**تقدير مستمر:** تقدير يرصد مؤقتا لكل مقرر تقتضي طبيعته إلى الدراسة في أكثر من فصل لاستكماله ويرمز له في السجل الأكاديمي بالحرف (م) أو (IP). وبعد إنتهاء الطالب من دراسة المقرر يمنح التقدير الذي حصل عليه، وإذا لم يستكمل المقرر في الوقت المحدد فيجوز لمجلس القسم الذي يتولى تدريس المقرر الموافقة على رصد تقدير غير مكتمل (ل) أو (IC) في السجل الأكاديمي للطالب.
Rules for moving from one level of study to another: 1- The student is transferred from his academic level to the next level if he successfully passes all the courses of that level. 2- The minimum academic load for a student is 12 academic units. 3- If the student fails one or more courses, he is required to study the courses according to the following controls:	**قواعد الانتقال من مستوى دراسي إلى آخر:** **1-** ينقل الطالب من مستواه الدراسي إلى المستوى الذي يليه إذا اجتاز بنجاح جميع مقررات ذلك المستوى. **2-** إذا رسب الطالب في مقرر أو أكثر يلزم بدراسة المقررات بالضوابط الآتية:

- إذا رسب الطالب فيما مجموعه الحد الأدنى من الوحدات الدراسية المقررة أو أكثر من مقررات مستوى واحد يلزم بإعادة دراسة مقررات الرسوب فقط في ذلك المستوى. - إذا رسب الطالب فيما مجموعه أقل من الحد الأدنى من الوحدات الدراسية، يلزم بدراسة مقررات الرسوب مع مقررات إضافية من المستويات التي تلي مستواه وفقا لما يأتي: **أ.** يكون التسجيل في المقررات ضمن ضوابط الخطة الدراسية والجداول. **ب.** يربط العبء الدراسي للطالب بمعدله التراكمي على ألا يقل عن الحد الأدنى. **ت.** لا يكون هناك تعارض في جدول الطالب. **ث.** عند تعذر تسجيل الطالب للعبء الدراسي من مقررات المستوى الذي يليه (بسبب التعارض أو عدم إنهاء المتطلب السابق أو لإنهائه جميع مقررات ذلك المستوى) يكمل عبؤه الدراسي من مقررات المستويات التالية المسموح بها. وإذا تعذر إكمال وحداته الدراسية بعد ذلك يكتفي بالوحدات الدراسية التي توافرت له حتى لو كان عددها دون الحد الأدنى. **ج.** يحدد عدد المستويات المسموح بتسجيل مقررات منها بثلاثة مستويات دراسية متتالية.	- If a student fails a total of the minimum prescribed academic units or more than one level's courses, he is required to retake only the failed courses at that level. - If the student fails a total of less than the minimum number of academic units, he is required to study the failed courses with additional courses from the levels below his level according to the following: a. Registration in courses is within the controls of the study plan and schedules. B. The student's academic load is linked to his cumulative GPA, provided that it is not less than the minimum. T. There should be no conflict in the student's schedule. Th. When a student is unable to register for the academic load from the courses of the next level (due to a conflict or failure to complete the previous requirement or because he has finished all the courses of that level), he completes his academic load from the courses of the next permitted levels. If it is not possible to complete his academic units after that, he will be satisfied with the academic units that are available to him, even if their number is less than the minimum. C. The number of levels for which courses are allowed to be registered is limited to three successive levels of study.

التقديرات ورموزها ونسبها المئوية وأوزانها

Grades, their symbols, percentages, and weights

المدلول بالإنجليزية	المدلول بالعربية	وزن التقدير من (5) (النقاط)		النسبة المئوية	الرمز بالإنجليزية	الرمز بالعربية
English Grade	Arabic Grade	Points out of 5		Percentage	English Symbol	Arabic Symbol
Exceptional	ممتاز مرتفع	5.00	5.00	100 - 95	A+	أ+
Excellent	ممتاز	4.75	4.75	95 أقل من 90	A	أ
Superior	جيد جدا مرتفع	4.50	4.50	90 أقل من 85	B+	ب+
Very good	جيد جدا	4.00	4.00	85 أقل من 80	B	ب
Above average	جيد مرتفع	3.50	3.50	80 أقل من 75	C+	ج+
Good	جيد	3.00	3.00	75 أقل من 70	C	ج
High pass	مقبول مرتفع	2.50	2.50	70 أقل من 65	D+	د+
Pass	مقبول	2.00	2.00	65 أقل من 60	D	د
Fail	راسب	1.00	1.00	أقل من 60	F	هـ
In-Progress	مستمر	-	-	-----	IP	م
In-Complete	غير مكتمل	-	-	-----	IC	ل
Denile	محروم	1.00	1.00	-----	DN	ح
Nograde-Pass	ناجح دون درجة	-	-	60 وأكثر	NP	ند
Nograde-Fail	راسب دون درجة	-	-	أقل من 60	NF	هد
Withdrawn	منسحب بعذر	-	-	-----	W	ع

المعدل الفصلي: حاصل قسمة مجموع النقاط التي حصل عليها الطالب في جميع المقررات التي درسها في أي فصل دراسي على مجموع الوحدات المقررة لتلك المقررات. وتحسب النقاط بضرب الوحدة المقررة في وزن التقدير الذي حصل عليه الطالب في كل مقرر درسه.	Semester average: the result of dividing the total points obtained by the student in all the courses he studied in any semester by the total units assigned for those courses. Points are calculated by multiplying the assigned unit by the weight of the grade obtained by the student in each course he studied.
المعدل التراكمي: حاصل قسمة مجموع النقاط التي حصل عليها الطالب في جميع المقررات التي درسها منذ التحاقه بالجامعة على مجموع الوحدات المقررة لتلك المقررات	Cumulative GPA: The result of dividing the total points obtained by the student in all the courses he has studied since joining the

university by the total units assigned for those courses.	

مثال لحساب المعدل الفصلي والمعدل التراكمي:

الفصل الدراسي الأول:

المقرر	عدد الوحدات	النسبة المئوية	رمز التقدير	وزن التقدير	عدد النقاط
103 سلم	2	85	ب+	4.50	9.00
334 كيم	3	70	ج	3.00	9.00
235 ريض	3	92	أ	4.75	14.25
312 فيز	4	80	ب	4.00	16.00
المجموع	12				48.25

مجموع النقاط (48.25)

معدل الفصل الأول = _____ = 4.02

مجموع الوحدات (12)

الفصل الدراسي الثاني:

المقرر	عدد الوحدات	النسبة المئوية	رمز التقدير	وزن التقدير	عدد النقاط
104 سلم	2	96	أ+	5.00	10
327 كيم	3	83	ب	4.00	12
314 ريض	4	71	ج	3.00	12
326 فيز	3	81	ب	4.00	12
المجموع	12				46

مجموع النقاط (46.00)

معدل الفصل الثاني = _____ = 3.83

مجموع الوحدات (12)

$$\text{المعدل التراكمي} = \frac{\text{مجموع النقاط } (48.25 + 46)}{\text{مجموع الوحدات } (12 + 12)} = 3.93$$

الفصل التاسع من لائحة الدراسات العليا: آلية التقييم.

المادة الرابعة والثلاثون:

يتم إجراء الاختبارات في مقررات الدراسات العليا، ورصد التقديرات، وفقاً للائحة الدراسة والاختبارات للمرحلة الجامعية، فيما عدا الآتي:

1- لا يُعد الطالب ناجحاً في المقرر إلا إذا حصل فيه على تقدير (جيد مرتفع) على الأقل.

2- اجتياز الطالب المقرر التكميلي في المرة الأولى بتقدير لا يقل عن (جيد مرتفع)، ولا يقل معدله التراكمي في مجمل المقررات التكميلية عن (جيد جداً).

3- فيما يتعلق بالاختبارات البديلة والمقررات التي تتطلب دراستها أكثر من فصل دراسي يتخذ مجلس الكلية ما يراه حيالها، بناءً على توصية مجلس القسم.

القواعد التنفيذية للمادة الرابعة والثلاثين

٣٤-١ يُعتمد وزن التقدير من خمس درجات، وتحسب التقديرات التي يحصل عليها الطالب في كل مقرر كما يلي:

الدرجة المئوية	رمز التقدير	وزن التقدير من (5)	التقدير
من 95 إلى 100	أ+	من ٤،٧٥ إلى ٥	ممتاز مرتفع
من 90 إلى أقل من 95	أ	من ٤،٥ إلى أقل من ٤،٧٥	ممتاز
من 85 إلى أقل من 90	ب+	من ٤ إلى أقل من ٤،٥	جيد جداً مرتفع
من80 إلى أقل من 85	ب	من ٣،٥ إلى أقل من ٤	جيد جداً
من 75 إلى أقل من 80	ج+	من ٣ إلى أقل من ٣،٥	جيد مرتفع
أقل من ٧٥	هـ	أقل من ٣	راسب

٣٤-٢ يحرم الطالب من دخول الاختبار النهائي في المقرر الذي تزيد نسبة غيابه فيه عن ٣٠% من المقرر، ويعد راسبا في المقرر، ويرصد له تقدير محروم (ح) أو (DN)، ولمجلس الكلية -أو لجنة البرنامج المشترك المعنية- رفع الحرمان والسماح للطالب بدخول الاختبار شريطة أن يقدم عذراً يقبله المجلس.