

Assiut University
Faculty of Pharmacy
Quality Assurance and Accreditation Project (QAAP)
Program Report

A- Basic Information.

١- Program Title : B.Sc. in Pharmaceutical Sciences

٢- Year ٢٠٠٥/٢٠٠٦

٣- Program Type: Single Double Multiple

٤- Faculty (Faculties): Pharmacy

٥- Department (Departments):

١- Pharmaceutics

٢- Pharmacognosy

٣- Pharmaceutical Medicinal Chemistry

٤- Pharmaceutical Organic Chemistry.

٥- Pharmaceutical Analytical Chemistry.

٦- Industrial Pharmacy

٧- Assistant Coordinator

٨- Coordinator: Prof. Dr. Adel Fawzy

B- Statistics:

١-٥

٢٠٠٣/٢٠٠٤

Grade	Attended	Absent	Joined exam	Successful students												September exam	Failed	Rejected	% of Passed students
				Excellent		Very good		Good		Passed		Referred students		Total					
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
Pre Pharmacy	٨٩٦	-	٨٩٦	٣٩	٤,٤	١٩٦	٢١,٩	٢٩٨	٣٣,٣	٧٣	٨,١	٢٣٦	٢٦,٣	٨٤٢	٩٤	-	٤٩	٥	٩٤
First year	٦٦٧	-	٦٦٧	٩	١,٣	٧٩	١١,٨	٢١٦	٣٢,٥	٧٣	١٠,٩	٢١٧	٣٢,٥	٥٩٤	٨٩,١	-	٦٤	٩	٨٩,١
Second year	٦٥٢	-	٦٥٢	٢٠	٣,١	١٦٥	٢٥,٣	٢٥٥	٣٩,١	٤٠	٦,١	١٢٣	١٨,٩	٦٠٣	٩٢,٥	-	٣٩	١٠	٩٢,٥
Third year	٦٤٨	-	٦٤٨	١٤	٢,٢	٨٣	١٢,٨	٢٠١	٣١,١	٧٥	١١,٦	٢٠٣	٣١,٣	٥٧٦	٨٨,٩	-	٥٥	١٧	٨٨,٩
Fourth year	٦٠٩	٧	٦٠٢	٨	١,٣	٨٤	١٣,٧	٢٥٣	٤١,٥	٨٢	١٣,٥	-	-	٤٢٧	٧٠,٩	١٣١	٣٥	٩	٧٠,٩
Total	٣٤٧٢	٧	٣٤٦٥	٩٠	٢,٦	٦٠٧	١٧,٥	١٢٢٣	٣٥,٢	٣٤٣	٩,٩	٧٧٩	٢٢,٤	٣٠٤٢	٨٧,٨	١٣١	٢٤٢	٥٠	٨٧,٨

B- Statistics:

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٢٠٠٤/٢٠٠٥

Grade	Attended	Absent	Joined exam	Successful students												September exam	Failed	Rejected	% of Passed students
				Excellent		Very good		Good		Passed		Referred students		Total					
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
Pre Pharmacy	١٠١٨	-	١٠١٨	٤٤	٤,٣	٢٦٩	٢٦,٥	٣٩٠	٣٨,٤	٦٤	٦,٣	٢٠٣	٢٠,٢	٩٧٠	٩٢,٣	-	٣٨	١٠	٩٢,٣
First year	٧٣٢	-	٧٣٢	١٨	٢,٥	٩٨	١٣,٤	١٨٦	٢٥,٤	٦٠	٨,٥	٢٦١	٣٥,٨	٦٢٣	٨٥,١	-	١٠٦	٣	٨٥,١
Second year	٥٨٤	-	٥٨٤	٢٦	٤,٥	١٣٧	٢٣,٥	١٩٦	٣٢,٤	٤١	٦,٢	١٣٦	٢٤,٣	٥٣٦	٩١,٩	-	٤٥	٣	٩١,٩
Third year	٦٦٠	-	٦٦٠	١٠	١,٥	١٠٣	١٥,٧	٢٨٤	٤٣,٣	٦٦	٩,٩	١٥٠	٢٢,٨	٦١٣	٩٢,٩	-	٤٧	-	٩٢,٩
Fourth year	٦٣٢	-	٦٣٢	٨	١,٣	١٠٠	١٥,٩	٢٧٩	٤٤,٤	٥٧	٩,١	-	-	٤٤٤	٧٠,٣	١٢٢	٦٦	-	٧٠,٣
Total	٣٦٢٦	-	٣٦٢٦	١٠٦	٢,٩	٧٠٧	١٩,٥	١٣٣٥	٣٦,٨	٢٨٨	٧,٩	٧٥٠	٢٠,٧	٣١٨٦	٨٧,٩	١٢٢	٣٠٢	١٦	٨٧,٩

B- Statistics:

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٢٠٠٥/٢٠٠٦

Grade	Attended	Absent	Joined exam	Successful students												September exam	Failed	Rejected	% of Passed students
				Excellent		Very good		Good		Passed		Referred students		Total					
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
Pre Pharmacy	٧١٩	-	٧١٩	٢٧	٣,٨	٢٠٤	٢٨,٢	٢٨٠	٣٨,٩	٤١	٥,٧	١٢١	١٦,٨	٦٧٣	٩٣,٦	-	٣٩	٧	٩٣,٦
First year	٧٦١	-	٧٦١	١٠	١,٣	٩٧	١٢,٧	٢٢٥	٢٩,٦	٧٦	٩,٩	٢٥١	٣٢,٩	٦٥٩	٨٦,٦	-	٨٧	١٥	٨٦,٦
Second year	٦١٨	-	٦١٨	١٥	٢,٤	٩٩	١٦	١٩٦	٣١,٧	٥٧	٩,٢	١٧١	٢٧,٧	٥٣٨	٨٧,١	-	٦٧	١٣	٨٧,١
Third year	٥٥٠	-	٥٥٠	٢٤	٤,٤	١١٧	٢١,٢	٢٠٦	٣٧,٥	٣٦	٦,٥	١١٧	٢١,٣	٥٠٠	٩٠,٩	-	٣١	١٩	٩٠,٩
Fourth year	٦٨٧	-	٦٨٧	١٢	١,٧	١٢١	١٧,٦	٣٤٥	٥٠,٢	٧٦	١١,١	-	-	٥٥٤	٨٠,٦	٩٦	٢٣	١٤	٨٠,٦
Total	٣٣٣٥	-	٣٣٣٥	٨٨	٢,٦	٦٣٨	١٩,١	١٢٥٢	٣٧,٥	٢٨٦	٨,٦	٦٦٠	١٩,٨	٢٩٢٤	٨٧,٧	٩٦	٢٤٧	٦٨	٨٥,٦

C- Professional Information.

١-Academic standards.

١,١- Adoption of program curriculum to academic standards and aims.

Subject	Lectures	Practical	Total*	%
١-Basic Sciences {٦٢,٥(٣١,٠٢%)}				
Physical, inorganic and organic chemistry	٨	٦	١١	١٧,٦
Zoology	٤	٤	٦	٩,٦
Computer Science	٢	٢	٣	٤,٨
Physics	٦	٤	٨	١٢,٨
Botany	٦	٦	٩	١٤,٤
English	٤	-	٤	٦,٤
Organic pharmaceutical chemistry	١٠	١١	١٥,٥	٢٤,٨
Essentials of mathematics	٤	-	٤	٦,٤
Psychology	٢	-	٢	٣,٢
٢-Applied Pharmaceutical Sciences {١١٥(٥٧,٠٦%)}				
Pharmaceutical analytical chemistry	٨	١٤	١٥	١٣
Pharmacognosy	٩	١٢,٥	١٥,٢٥	١٣,٣
Pharmaceutics	١٩	٢٦	٣٢	٢٧,٨
Microbiology	٤	٤	٦	٥,٢
Pharmacology	٤	٥	٦,٥	٥,٧
Phytochemistry	٦	٦	٩	٧,٨
Biochemistry	٤	٤	٦	٥,٢
Pharmaceutical medicinal chemistry	٨	١٠	١٣	١١,٣
Industrial pharmacy	٤	٢,٥	٥,٢٥	٤,٦
Applied pharmacognosy	٤	٦	٧	٦,١
٣-Medical Sciences {١٣,٥(٦,٧%)}				
Anatomy	١	١	١,٥	١١,١
Histology	١	١	١,٥	١١,١
Physiology	٤	-	٤	٢٩,٦
Pathology	١	١	١,٥	١١,١
Biostatistics and Bioassay	٤	٢	٥	٣٧,١
٤-Health and environmental Sciences {٨,٥(٤,٢٢%)}				
Parasitology	١	١	١,٥	١٧,٦
Public Hygiene	٢	-	٢	٢٣,٦
Toxicology, forensic chemistry and first aid	٤	٢	٥	٥٨,٨
٥-Pharmacy management, Marketing and Pharmacoeconomics {٢(١%)}				
Pharmacy administration	٢	-	٢	١٠٠
٦-Pharmacy Practice**				
	-	٣٠٠	٢٠١,٥*	*

* المجموع بعد حساب كل ساعتين عملي تكافئ ساعة نظري
**الحسابات لا تشمل ساعات التدريب الصيفي

١,٢- Learning outcomes (ILOs) of the completed program.

a-Knowledge and Understanding: having successfully completed this program the graduate should have knowledge about:

a^١- Fundamentals of basic sciences: botany, zoology, physics, mathematics, general and organic chemistry in the level that prepare for sound comprehension of pharmaceutical and medical subjects.

a^٢- Fundamentals of medical basic sciences .

a^٣- Basic understanding of the physical and chemical properties of the materials that go into industrial manufacture of medicines.

a^٤- Physico-chemical aspects of medicines and biological systems, including thermodynamics, chemical kinetics and assessment of chemical and physical stability.

a^٥- Disease attributes: microbial, parasitic, viral and of metabolic disorders.

a^٦- Normal and abnormal body function: physiology, biochemistry, genetics, microbiology, nutrition, immunology, infective processes, pathology and pathophysiology.

a^٧- Detailed knowledge about drug formulation , packaging and storage.

a^٨- Essentials of pharmacokinetics and bioavailability of medicines.

Understand the following:

a^٩- Significance of a healthy life style including relevant diet, nutrition, exercise... etc.

a^{١٠}- Etiology and epidemiology of major diseases

- a¹ - Profound knowledge of the actions, uses, adverse reactions, and toxicity of medicines.
- a² - Interactions and abuse of medicines.
- a³ - Absorption, distribution, metabolism and excretion of medicines, including routes of administration, and mathematical modeling
- a⁴ - Properties of medicinal and toxic plants .
- a⁵ - Sources and purification of medicines of synthetic, natural, biotechnology products and excipients .
- a⁶ - Assay of drugs: chemical , biological and drug monitoring
- a⁷ - Non-pharmacological approaches for treatment of diseases .
- a⁸ - The relevant law, ethics, and codes of practice in community and industry .
- a⁹ - Understands the principles of unit operations in drug manufacture.

b- Intellectual Skills:

- b¹ - Prepare medicines for individual patient use
- b² - The ability to advise patients and others on the safe and effective use of medicines
- b³ - Ability to find appropriate methods for directing patient toward enhanced therapeutic efficiency.
- b⁴ - Design, implement, monitor, evaluate, and modify or recommend modifications in drug therapy to insure effective, safe, and economical patient care.
- b⁵ - Identify, assess, and solve medication-related problems,
- b⁶ - Design and evaluate packaging and labeling processes.
- b⁷ - Predict the properties of medicinal agents and their relation to molecular structure

b[^]- Recommends, designs, and develops analytical methods applicable for control of biological, chemical, and physical properties and the degradation products of medicines in bulk and in dosage forms.

b⁹- Rational choice of adjuvant/s used for delivery and in formulation of biologically active molecules .

b¹⁰- Control of microbial contamination, sterilization processes, and aseptic procedures.

b¹¹- Ability to integrate information and propose approaches for design of medicinal agents and approaches to their discovery.

b¹²- Applies acquired principles for medicine formulation and systems for medicine delivery in the body.

b¹³- Ability to gather, comprehend, and assesses reliably scientific data.

b¹⁴- Collaborate with others as active partner in drug research team

b¹⁵- Rationalize the suitable drug (s) affecting specific diseases related to biochemical disorders.

b¹⁶- Predict the appropriate medication in critical condition

c- Professional and Practical Skills:

c¹- Evaluates drug orders or prescriptions,

c²- Accurately and safely compounds package and dispense medicines in appropriate dosage forms.

c³- Present oral and written information about drugs and pharmaceuticals .

c⁴- Provide supportive clinical services such as drug information, drug surveillance, drug delivery and distribution.

c^o- Presentation of medicines-based health care material and arguments clearly and correctly , writhen or orally, to other health professionals and, where appropriate, to lay audiences.

c⁷- Cognitive dispensing of dressings, diagnostic systems, medical appliances and devices.

c^v- Production of pharmacy specific documentation.

c[^]- The operation of standard pharmaceutical instrumentation

c⁹- Skills in the analysis of medicines

c¹⁰- The ability to undertake risk assessments concerning pharmaceutical procedures and practices

c¹¹- Clarify the impact of certain clinical analytical reports.

c¹²- Provide good advice about balanced diet to promote the efficiency of medication

d- General and Transferable Skills:

d¹- Information technology skills, including word processing, spreadsheet use, database use, archiving data and information retrieval through online computer searches, and internet communication.

d²- Calculation of medicine doses and dosage regimens.

d³- Interpretation of prescriptions and other orders for medicines

d⁴- Recommend, counsel, and monitor patient use of nonprescription drugs.

d^o- Provide emergency first aids.

d⁷- Ability to interact effectively with patients, the public and health care professionals ; including communication, both written and oral.

d^v- Critical evaluation, interpretation of pharmaceutical information and data.

d[^]- An ethical attitude and approach

d⁹- Independent study skills as preparation for continuing professional development.

d¹⁰- Time management and organization, as evidenced by the ability to plan and implement efficient and effective modes of working.

d¹¹- Work in a variety of health care settings: team working, or need to work within personal limitations.

1,2,3- Teaching methods.

Teaching methods	Programme ILOs (By No.)			
	K, U [*]	IS ^{**}	P.S ^{***}	G.T.S ^{****}
Lecture	a ¹ , a ² , a ³ , a ⁴ , a ⁵ , a ⁶ , a ⁷ , a ⁸ , a ⁹ , a ¹⁰ , a ¹¹ , a ¹² , a ¹³ , a ¹⁴ , a ¹⁵ , a ¹⁶ , a ¹⁷ , a ¹⁸ , a ¹⁹	b ² , b ³ , b ⁴ , b ⁵ , b ⁶ , b ⁷ , b ⁸ , b ⁹ , b ¹⁰ , b ¹¹ , b ¹² , b ¹⁵ , b ¹⁶	c ⁴ , c ⁵ , c ⁹ , c ¹⁰ , c ¹¹ , c ¹²	d ¹ , d ² , d ³ , d ⁴ , d ⁵ , d ⁶ , d ⁷ , d ⁸ , d ¹⁰ , d ¹¹
Lab	a ⁴ , a ⁵ , a ¹⁴ , a ¹⁵ , a ¹⁶	b ¹ , b ⁶ , b ⁷	c ¹ , c ² , c ⁶ , c ⁷ , c ⁸ , c ⁹	d ¹ , d ² , d ³ , d ⁴

- * Knowledge and Understanding
- ** Intellectual Skills
- *** Professional and Practical Skills
- **** General and Transferable Skills

1,2,3- Learning Methods.

Learning methods	Programme ILOs (By No.)			
	K, U *	IS **	P.S ***	G.T.S ****
Tutorial		b2, b3, b4, b8, b9	c1, c7, c9, c11, c12	d2, d3, d4, d8, d9, d10, d11
Seminars		b2, b3, b7, b11, b10	c3, c8	d1, d7
Essay and Reports		b8, b13, b14	c3	d1, d6, d9
Field Training	a7, a12, a17, a18	b1, b2, b3, b14, b16	c2, c8, c7, c10, c11, c12	d2, d3, d4, d8, d6, d7, d11

* Knowledge and Understanding

** Intellectual Skills

*** Professional and Practical Skills

**** General and Transferable Skills