



**IBN SINA NATIONAL COLLEGE FOR MEDICAL
STUDIES, JEDDAH**

KINGDOM OF SAUDI ARABIA

Pharm. D. Program

Accredited By



STUDENT HAND BOOK

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PHARM. D. PROGRAM MISSION

To graduate competent clinical pharmacists capable of providing comprehensive pharmaceutical care to the community with an aptitude to Lifelong learning through provision of knowledge, clinical skills, research abilities and ethics of practice within a motivating learning environment.

PHARM. D. PROGRAM OVERVIEW

Pharm. D. Program is responsible for preparing students to begin the practice of pharmacy as vital members of the health care team or to assume other roles where pharmacists' knowledge and skills are required. Pharmaceutical education will also prepare students to function as professionals and informed citizens in a changing health care environment. It is responsible for generating and disseminating new knowledge about pharmaceuticals and about the role of pharmaceuticals in the unique care system of Saudi Arabia.

Pharm. D. Program is fully accredited by Education Evaluation Commission: National Centre for Academic Accreditation and Assessment, Saudi Arabia.

ISNC Pharm. D. Program acknowledges Pharm. D. as an evolving mode of pharmacy practice in which the pharmacist, in concert with other health professionals, takes

an active role on behalf of patients in making appropriate drug choices, by effecting distribution of medications to patients, and by assuming direct responsibilities to empower patients to achieve the desired outcomes of drug and related therapy.

The professional program in pharmacy provides educational preparedness to enable the pharmacist to collaborate with other health professionals and to share in responsibility for the outcomes of drug and related therapy. The professional program in pharmacy also promotes the knowledge, skills, abilities, attitudes, and values necessary to the aspect of pharmaceutical care directed toward the general practice of pharmacy in any setting. The philosophy of practice as well as the necessary professional attitudes and ethics, will nurture during the course of study. Moreover, the College insures the professional growth of students, including a positive outlook toward all aspects of pharmacy practice. The faculty and professional staff are qualified individuals with unique interests and backgrounds who are dedicated to educating pharmacy students according to international principles and practices of pharmaceutical care.

ISNC Pharm. D. program commenced in 2004 corresponding to 1425H, duly licensed by the MOHE (began its operations in its own premises located on Al-Mahjar Street, next to the King Abdul Aziz Hospital, in the

Southern part of Jeddah, with a mission to fulfill the nation's needs by producing trained Pharm. D. graduates.

The campus of ISNC is spread over an area of 27,500 sqm and is self-contained and accommodates all necessary facilities including the Ibn Sina College hospital. Design of the main building is in the shape of the letter 'H' where each of the wings houses the genders separately, yet facilitates easy communication and access to critical facilities and the central administrative setup. However, additional hospitals (New Al Jedaani Hospital at Ghulail District and Al Jedaani Hospital at Al Safa District) from within Al Jedaani Group are also deployed in training the students in order to ensure adequate exposure of each student to clinical facilities.

Pharm. D. Program new curriculum is designed as patient oriented care. The curriculum employs the National Qualification Framework (NQF) for formulating the learning outcomes of the program and its different courses.

Development of this new curriculum at ISNC was closely supervised by a college steering committee that included internal and external members who have experience in curriculum design and development, and it come as a product of efforts of collaboration between:

- Subject experts in the field of Clinical Pharmacy.
- Experts in Medical Education.
- Experts in curriculum development.
- Experts in quality assurance in education.

A **modern curriculum** focused on rigorous standards in literacy, numeracy, skills and character development will be prepared". With regards to this item and continuing developments in pharmaceutical and clinical sciences and technology, updating the current curriculum is essential to meet the advances in the field of Clinical Pharmacy.

The first curriculum of Pharm. D. Program at ISNC was initially designed and developed on 2004-2005 by **King Abdullah Consulting and Research Institute (KACRI)**.

The curriculum has been designed based on the concept of "learning objectives" rather than "students' learning outcomes", where the focus was mainly on the process rather than the product and the intentions of the program rather than the achievements of the students.

In the academic year 2014-2015, it was strongly recommended to shift from "learning objectives" to "students' learning outcomes" so that the program be compatible with the requirements of the **Education Evaluation Commission – National Center for Academic Accreditation and Education Evaluation (EEC-NCAAA)** in order to apply to for the academic accreditation on the

national level. That shift has been done through in-house experts in medical education and curriculum development in consultation with external experts in Clinical Pharmacy education. However, this process was like grafting an existent curriculum, without a comprehensive change in all the components of that curriculum.

ISNC holds a distinction in the country for being as the first private institution to introduce Pharm. D degree in its pharmacy program. The Pharm. D program, in ISNC has two academic departments' namely pharmaceutical science department and Clinical Pharmacy & pharmacology department. The design of the Pharm. D. program conforms to national as well as international standards of pharmacy education in building up a curriculum and a study plan and has made appropriate revisions/changes as required to suit the teaching learning strategies at the college. The introduction of Saudi Digital library, Wi-Fi and more digital learning resources have added to the teaching and learning process.

Field experience activities are abundant in the program during the clerkships. The students benefit largely from community activities and training in both governmental and private hospitals and get exposed to a variety of cases.

Commendable work has been done to identify Program learning outcomes (PLO) aligned with the five learning domains of the National Qualification Framework. The establishment of a Medical Education Unit (MEU) has helped to develop the Course Learning Outcomes (CLO) and align with the PLOs.

PLOs, Assessment Methods, and teaching Strategy are aligned to articulate a consistent agreement between the student learning and teaching methods. The CLOs are well explained to the students at the beginning of each course.

ISNC and Pharm. D. Program is accredited by Education Evaluation Commission: National Center for Academic Accreditation and Assessment, Saudi Arabia (EEC-NCAAA).

Benefits of Accreditation:

- » Accreditation assures that a program has met quality standards set by the profession.
- » Accreditation helps students and their parents choose quality college programs.
- » Accreditation enables employers to recruit graduates they know are well-prepared.

» Accreditation provides a structured mechanism to continuously assess, evaluate, and improve the quality of the program.

» Accreditation is an important factor when a college or university is deciding whether to accept transfer credit from a student's previous school.

VICE DEAN PHARM.D. PROGRAM,

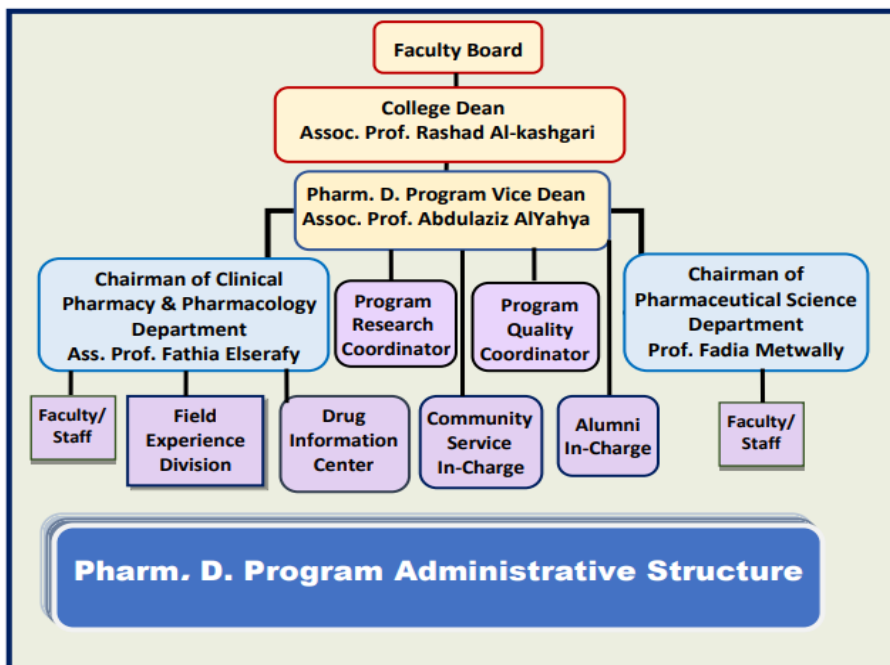
Dr. ABDULAZIZ ALYAHYA, MSc, PhD, USA

Received his PhD in Pharmacology and Toxicology from university of Kansas, Lawrence, KS, United States. He is Associate Professor in Department of Pharmacology, College of Pharmacy, King Saud University, Riyadh. Dr. Abdulaziz ALYahya is currently the Vice Chairman, Board of Trustees, Ibn Sina National College for Medical Studies, Jeddah, KSA. In addition, he is an associate member of international collaboration on repair discoveries (ICORD), University of British Columbia, Vancouver, BC, Canada. Also, he is a member of the society for Neuroscience.

SUMMARY OF CREDIT HOURS AND DURATION

Foundation Year	1 year	33 credits
Pharmacy courses	4 years	134 credits
Clinical Clerkship	1 year	30 credits
Total	6 Years	197 credits

ORGANIZATION CHART



Pharm. D. Program Goals & Objectives

Program Goals And OBJECTIVES	
Goal 1	Meet national & International dynamic need of the curriculum in the field of clinical pharmacy
Objective 1	Continue to improve the program curricula and seek out for innovative partnerships nationally or internationally to enhance and develop the curriculum content.
Objective 2	Use electronic platforms to explore and implement new and innovative alternative methods of curriculum delivery.
Goal 2	Achieving internationally recognized best practices of clinical pharmacy education
Objective 1	Promote program excellence and effectiveness.

Objective 2	Make new recruitments and improve retention efforts for faculty of high value
Objective 3	Enhance clinical field training to achieve internationally recognized best practices.
Goal 3	Develop infrastructure and learning resources as per curriculum needs.
Objective 1	Ensure academic resources excellence utilizing state-of-the-art equipment/Instrument in all areas of functioning.
Objective 2	Facilitate student learning through the use of advanced educational infrastructure to deliver courses effectively.
Goal 4	Promote continuous education programs for faculty in the field of higher education and research.
Objective 1	Encourage staff to actively participate in faculty development programs (FDP).
Objective 2	Increase the number of faculty development programs within college with the involvement of Medical Education Unit, LTA Unit, Research Center, Quality Assurance Centre and Faculties
Goal 5	Expand scientific research activities among staff and students by engaging in interdisciplinary and community based research.
Objective 1	Encourage the students to participate in the faculty- directed research
Objective 2	Promote inter-program research and research synergies.
Objective 3	Integrate research and community service
Goal 6	Enhance community services and health awareness
Objective 1:	Encourage staff and students to carry out

	volunteer services in community-oriented events.
Objective 2:	Enhance public health and raise its overall health awareness
Goal 7	Enhance academic program monitoring system to reinforce quality practices among program staff and field staff members.
Objective 1	Employ the guidelines of program monitoring and evaluation as per EECHEs standards.

CURRICULUM STUDY PLAN

FOUNDATION YEAR REQUIREMENTS					
Year (1) Semester (1)		Hrs	Year (1) Semester (2)		Hrs
ENGL 101	English for Academic Purposes-I	7	ENGL 102	English for Academic Purposes-II	4
PHYS 101	Medical Physics	3	ISLM 102	Islamic Ethics	2
ITHS 101	Information Technology for Health Science	2	CHEM 102	Chemistry for Health Science	4
EDU 101	Study Skills	2	ARAB 101	Arabic Language	2
ARAB 101	Medical Terminology	2	BIOL 102	Cell Biology and Genetics	3
			EDU 102	Communication Skills	2
Total		16	Total		17

YEAR TWO:

Year (2) Semester (1)		Hrs	Year (2) Semester (2)		Hrs
ANAT 211	Anatomy	3	BIOC 221	Biochemistry-II	3
BIOC 211	Biochemistry-I	2	PHCH 221	Pharmaceutical Analytical chemistry	4
PHCT 211	Pharmaceutical Calculation	1	PHCH 222	Intro to Medicinal Chemistry	1
PHCH 211	Pharmaceutical Organic Chemistry	3	PHCT 221	General Immunology	2
PHSL 211	Physiology-I	3	PHCT 222	Pharmaceutical Microbiology	3
PSYC 211	Psychology & Behavioral Science	2	PHSL 221	Physiology-II	2
PHCL 211	Intro to Pharmacy Profession	1	PHCL 221	Basic Clinical Skills	1
PHCL 212	First Aid	1			
Total		16	Total		16

Note: Elective Courses: Student has to complete three elective courses, one in each year from third to the fifth year of the program.

ELECTIVE COURSES		
Course Code & No.	Course Title	Credit Hours
Third Year Elective Courses		
PHCH 322	Introduction to Drug Design	1 (1+0+0)
PHCL 323	Pharmacy Seminar	1 (0+1+0)
PHCT 323	Pharmaceutical Industry	1 (1+0+0)
Fourth Year Elective Courses		
PHCL 424	Pediatric Drug Therapy	1 (1+0+0)
PHCL 425	Comprehensive Diabetes Management	1 (1+0+0)
PHCL 426	Health Informatics	1 (1+0+0)
Fifth Year Elective Courses		
PHLG 521	Directed Research	1 (0+1+0)
BIOS 521	Applied Biostatistics	1 (1+0+0)

Year Three:

Year (3) Semester (1)		Hrs	Year (3) Semester (2)		Hrs
PHCH 311	Introduction to Natural Product	2	PHCH 321	Medicinal Chemistry-2	4
PHCH 312	Drug Discovery and Development	1	PHCL 321	Pathophysiology-II	2
PHCH 313	Medicinal Chemistry-1	2	PHCT 321	Pharmaceutics-II	3
PHCL 311	Pathophysiology-I	2	PHCT 322	Biopharmaceutics	2
PHCL 312	Pharmacy Practice	2	PHLG 321	Pharmacology-II	3
PHCT 311	Pharmaceutics-I	3	PHLG 322	Chemotherapy	2
PHLG 311	Pharmacology-I	4	PHCH 322 PHCL 323 PHCT 323	Electives: Int. to Drug Design Pharmacy seminar Pharmaceutical Industry	1
SERV 311	Community Service	1			
Total		17	Total		17

Introductory Pharmacy Practice-1 (IPP-1) – Summer Training (After Year 3)	
IPP 321	Introductory Pharmacy Practice- IPP-1

Year Four:

Year (4) Semester (1)			Year (4) Semester (2)		
		Hrs			Hrs
PHCL 411	Pharmacotherapy-I	4	PHCL 421	Pharmacotherapy-II	4
ISLM 407	Ethics & Professionalism	2	PHCL 422	Drug and Poison Information Services	2
PHCT 411	Pharmaceutics-III	2	PHCL 423	Clinical Skills	1
PHLG 411	Pharmacology-III	2	PHCH 421	Pharmacopeial Analysis	3
PHLG 412	Toxicology	3	PHCT 421	Basic Pharmacokinetics	2
SAFE 407	Patient Safety	2	PHLG 421	Pharmacology-IV	2
RESM 407	Research Methodology & Biostatistics	3	PROJ 408	Research Project-1	1
			PHCL 424 PHCL 425 PHCL 426	Elective Course: Pediatric Drug Ther. Comprehensive Diabetes Managmt. Health Informatics	1
Total		18	Total		16

Introductory Pharmacy Practice-2 (IPP-2) –Summer Training (After Year 4)	
IPP 421	Introductory Pharmacy Practice- IPP-2

Year Five:

Year (5) Semester (1)		Hrs	Year (5) Semester (2)		Hrs
PHCL 511	Pharmacotherapy-III	4	PHCL 521	Pharmacotherapy-IV	4
PHCL 512	Pharmacy Management	2	PHCL 522	Pharmacoeconomics and epidemiology	3
PHCL 513	Clinical Pharmacokinetics	1	PHCL 523	Evidence-based Medicine	2
PHCL 514	Pharmacogenomics	1	PHCL 524	Pharmacovigilance	1
PHCL 515	Advanced Pharmacy Practice	2	PHCL 525	Pharmacy Law in KSA	1
PHCT 511	Dispensing of Medication	2	PHCT 521	Pharmaceutical Biotechnology	2
PHLG 511	Alternative Medicine	2	PHCT 522	Over the Counter Drugs	2
PHLG 512	Drugs of Abuse	2	PHCT 523	Nuclear Pharmacy	1
PROJ 509	Research Project-2	1	PHLG 521 BIOS 521	Directed Research Applied Biostatistics	1
Total		17	Total		17

Year Six:

CLERKSHIPS FOR 6 YEAR STUDENTS:

No.	Year (6) Semester (1)	Hrs
1	Clerkship-I	3
2	Clerkship-II	3
3	Clerkship-III	3
4	Clerkship-IV	3
Total		12
No.	Year (6) Semester (2)	Hrs
1	Clerkship-V	3
2	Clerkship-VI	3
3	Clerkship-VII	3
4	Clerkship-VIII	3
Total		12
No.	Year (6) Semester (3) (Summer)	Hrs
1	Clerkship-IX	3
2	Clerkship-X	3
Total		6

CLERKSHIP ROTATION:

Course Code & No.	Rotation
PHCL- 611	Internal Medicine (Cardiology)
PHCL- 612	Internal Medicine (Endocrinology)
PHCL- 613	Internal Medicine (Gastroenterology)
PHCL- 614	Internal Medicine (Infectious diseases)
PHCL- 615	Internal Medicine (Nephrology)
PHCL- 616	Internal Medicine (Pulmonary)
PHCL- 617	In-Patient Pharmacy services
PHCL- 618	Out Patient Pharmacy Services

Course Code & No.	Rotation
PHCL- 619	Drug Information & Poison Service
PHCL- 621	Ambulatory care
PHCL- 622	Internal Medicine(Neurology)
PHCL- 623	Internal Medicine (Psychiatry)
PHCL- 624	Internal Medicine (Oncology/Hematology)
PHCL- 625	Emergency Care
PHCL- 626	Critical Care-Units
PHCL- 627	Pediatrics
PHCL- 628	Nutritional Support
PHCL- 629	Poison Control/Toxicology Service

PHARM. D. PROGRAM LEARNING OUTCOMES

The Program Learning Outcome classified in all the domains of NQF aligned with the Pharm. D. Program mission. A student at the time of graduation from the Pharm. D. program at ISNC will have experiences gained from all the five domains of learning outlined in the NQF for Higher Education, namely

- ✓ Pharm. D. Knowledge
- ✓ Cognitive Skills
- ✓ Interpersonal Skills
- ✓ Communication and Numerical skills
- ✓ Psychomotor Skills

The outcomes in all the five domains are well incorporated both in the program level as well as individually the course level and these domains complement each other which is

evidenced in the PLO mapping matrix with the courses.

Emphasis was given to assessment methods since it is often assessment that drives student priorities for learning, which demands for the establishment of reliable and valid assessment methods.

Pharm. D. Program Learning Outcomes (PLOs)	
1.0 Knowledge: At the end of the program graduate should be able to	
1.1	Describe the basic principles and concepts of basic, pharmaceutical, clinical and social sciences related to pharmacy profession.
1.2	Outline principles of drug design, Structure Activity Relationship, synthesis, analysis and formulation of pharmaceutical dosage forms.
1.3	Recognize ethical, legal and economic aspects of pharmacy profession.
1.4	Outline principles of research methodology.
2.0 Cognitive Skills: At the end of the program the graduate should be able to	
2.1	Apply concepts and principles of pharmaceutical, clinical sciences in pharmacy profession.
2.2	Develop therapeutic care plans using the principles of evidence-based healthcare and critical appraisal.
2.3	Discuss drug design, screening, synthesis, analysis, efficacy and safety of medications used in different diseases and health-related conditions.
2.4	Demonstrate basic research skills
3.0 Interpersonal Skills & Responsibility: At the end of the program the graduate should be able to	
3.1	Demonstrate professional attitude and ethical behavior in

	pharmacy practice, research and industry.
3.2	Demonstrate effective teamwork and inter-professional collaboration skills.
3.3	Communicate effectively with colleagues, healthcare providers, patients and their families, pharmaceutical industrialists and other community members.
4.0 Communication, Information Technology, Numerical	
4.1	Utilize statistical and pharmacy specific software.
4.2	Interpret data extracted by different statistical methods in bio-analysis and forensics.
5.0 Psychomotor skills: At the end of the program graduate should be able to	
5.1	Perform effective pharmaceutical procedures in drug screening, analysis, synthesis, manufacturing and design.
5.2	Demonstrate basic clinical skills and first aid measures in health care settings.

TEACHING METHODS

- ✓ Interactive Lectures
- ✓ Group Discussions
- ✓ In Class Written Reflections
- ✓ Seminars
- ✓ Tutorials
- ✓ Role Play
- ✓ Case Based Teaching Sessions
- ✓ Clinical Teaching Sessions
- ✓ Self-Directed Learning (SDL)
- ✓ E- Learning
- ✓ Audio Video Demonstrations
- ✓ Project-Based Learning

- ✓ Independent Learning Activities (IDL)
- ✓ Skills Lab and Simulation Training Sessions
- ✓ Field Visits
- ✓ Field Work
- ✓ Computer Lectures and Computer Lab.
- ✓ Software Data Analysis And Extraction
- ✓ Journal Club
- ✓ Practical Lab Sessions
- ✓ Hands-On Practical Activities
- ✓ Clinical Clerkships
- ✓ Flipped Classrooms

ASSESSMENT METHODS

- ✓ Multiple choice questions (MCQ)
- ✓ Short Essay questions (SAQ)
- ✓ Case Based Multiple Choice Questions
- ✓ Objective Structured Practical Examinations (OSPE)
- ✓ Objective Structured Clinical Examination (OSCE)
- ✓ Direct Observations(based on Rubrics)
- ✓ Simple Matching Questions
- ✓ Continuous Activity Assessment (Quizzes')
- ✓ Practical Exams
- ✓ Assignments :
 - ✚ Poster Presentation
 - ✚ Drug Evaluation Monograph
 - ✚ Journal Club Presentation
 - ✚ Patient Education Material
 - ✚ Research Articles

*Kindly visit college website (digital library) for detailed guidelines of Pharm.D. Program assessments

Grading and GPA

The program follow the universal grading system as given below.

Symbol	Mark Limits	Points		Meanings
A+	95-100	5.0	4.0	Exceptional
A	90-95	4.75	3.75	Excellent
B+	85-90	4.5	3.5	Superior
B	80-85	4.0	3.0	Very Good
C+	75-80	3.5	2.5	Above Average
C	70-75	3.5	2.0	Good
D+	65-70	2.5	1.5	High Pass
D	60-65	2.0	1.0	Pass
F	Less 60	1.00	0	Fail

DRESS CODE

Students dress should reflect high standards of personal self-image so that each student may share in promoting a positive, healthy and safe atmosphere within the College community.

Appropriate distinction is made between the proper attire for class, practical/clinics, formal affairs, relaxation, and play. In general a student is expected wear scrub suit and a lab coat. In addition the female students are advised to abide by the Islamic dress code. Must wear Lab coat, Full Shirt and Trouser (Males), Head cover (Female); color of the scrub should be **light blue**. Weird designed dresses are not allowed, No casual dress allowed. Must wear shoes; slipper and sandals are not allowed.

IMPORTANT CONTACTS

No	Name	Contact Number: 6356555 Ext	
		Male	Female
1.	Secretary for Vice Dean Pharm. D. Program	408	
2.	Maintenance Department	639	132
3.	Admission/Registration	403/106	131
4.	Academic Affairs	222	277
5.	Student Affairs	105	129
6.	Student Support Unit	455	453
7.	Library	110	445
8.	Research Center	441	
9.	Community Service Unit	452	
10.	Finance	175	

NOTES

1. If student fails to report/attend the classes in the first three weeks after the commencement of the semester, he/she is disqualified from that semester.
2. If a student discontinues the studies in ISNC without prior intimation, then a fine is imposed on the student.
3. If student studies three weeks in a semester and later discontinues he/she is not eligible for any refund.



PHARM. D. PROGRAM MISSION

To graduate competent clinical pharmacists capable of providing comprehensive pharmaceutical care to the community with an aptitude to Lifelong learning through provision of knowledge, clinical skills, research abilities and ethics of practice within a motivating learning environment.