

Master of Pharmacy Administration (MPA)

1.	School	Pharmacy
2.	Department	Departments of School of Pharmacy مجموعة الأقسام في كلية الصيدلة
3.	Program title (Arabic)	ماجستير إدارة اعمال صيدلانية
4.	Program title (English)	Master of Pharmacy Administration (MPA)
5.	Track	Thesis

	Specialization	Degree	Dep	Faculty	Year	Track
Plan Number	042	8	03	12	2022	1

First: General Rules & Conditions:

1. This plan conforms to the valid regulations of graduate studies programs at the University of Jordan.
2. Admission priorities (pre-requisite degrees):
 - a. The First Priority: Bachelor of Pharmacy degree (BSc Pharm) or Doctor of Pharmacy degree (PharmD)
 - b. The Second Priority: NA

Second: Special Conditions:

1. At least one year experience working in pharmaceutical marketing or pharmacoeconomics or a job experience in the previously mentioned areas obtained during the first year of study in the program.

Third: Study Plan:

Students are requested to complete (34) Credit Hours of study organized as follows:

1. Obligatory Courses (16) Credit Hours:

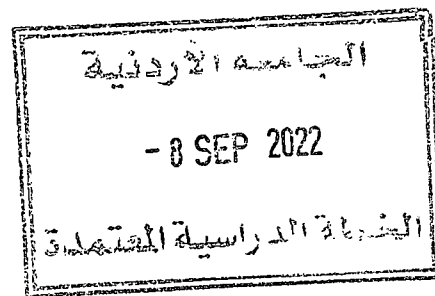
Course No.	Course Title	Credit Hours	Theory	Practical	Pre/Co-requisite
1203730	Pharmaceutical business administration	3	3	-----	/
1203731	Pharmaceutical statistics and research methodology	3	3	-----	/
1203732	Pharmacoeconomics	3	3	-----	/
1203733	Pharmaceutical marketing management and health services	3	3	-----	1203730
1203734	Pharmacy informatics	2	2	-----	1203731
1203735	Pharmaceutical legislations and intellectual property	2	2	-----	/

الجامعة الأردنية
- 8 SEP 2022
الخطة الدراسية المعتمدة

2. Elective Courses: Studying (9) Credit hours from the following:

Course No.	Course Title	Credit Hours	Theory	Practical	Pre/Co-requisite
1203736	Pharmaceutical financial, strategic management and health policies	3	3	-----	1203730
1203737	Regulatory affairs and quality	3	3	-----	1203735
1203738	Advanced topics in pharmaceutical business	3	3	-----	1203730
1601782	Supply chain management	3	3	-----	1203730
1604724	International marketing	3	3	-----	1203733
1601715	Human resources management	3	3	-----	1203730
1601717	Project management	3	3	-----	1203730

3. Thesis: (9) Credit hours (1203799).



Course description*

- **Pharmaceutical business administration (1203730): 3 Credit hours**

Learn the main principles of business. Focus on marketing, economics, management, accounting, and finance. Understand these principles in a simple and comprehensive way and know their need and applications in pharmacy.

- **Pharmaceutical statistics and research methodology (1203731): 3 Credit hours**

Understand the foundations of pharmaceutical statistics and scientific research methodology. Learn about descriptive statistics, probability concepts, statistical inferences, hypothesis testing, regression, and correlation, also the application of statistics in various fields of pharmacy, such as analysis of research outcomes, statistical modelling techniques, experimental design, and analysis of errors (standard error), analysis of the variance and confidence intervals, ensuring quality and chemometrics observation. Introduce to research methodology that focus on study design, inclusion and exclusion criteria, sampling, data collection, outcome measures, results and conclusion evaluation for different research designs, also writing, understanding, and interpreting scientific articles in the field of pharmacy and health science. Learn to select and carry on appropriate statistical test for a set of data and hypothesis, interpret statistical test results output, appreciate the main principles of research in pharmacy, describe major research designs, understand the terminology associated with research, understand the principles of the research ethics and plagiarism, describe the strengths and weaknesses of different research designs and understand and interpret research findings disseminated in scientific journal articles.

- **Pharmacoeconomics (1203732): 3 Credit hours**

Learn about the basic concepts and applications of Pharmacoeconomics. Study methods and techniques for evaluating costs and outcomes of healthcare interventions. Gain knowledge about economic evaluation, decision analysis and decision analytical models for determination and efficient use of resources. Introduce to drug pricing policies and pharmaceutical expenditure control, as part of overall health spending. Understand the main types of economic analysis that are used in evaluating the effectiveness of drugs. Learn how the principles of epidemiology are utilized in pharmaceutical sciences.

- **Pharmaceutical marketing management and health services (1203733): 3 Credit hours**

Learn about marketing and promotional mix elements from a pharmaceutical perspective, including personal selling steps and skills, pharmaceutical marketing strategies, analysis of the

marketing environment, its impact on future marketing planning as well as identifying doctor's types and behaviors and how to deal with them. Understand how to prepare pharmaceutical marketing plans and their applications in Jordan market.

Gain knowledge about the basic concepts of marketing services and international marketing. Focus on marketing strategies for health services in different health organizations both in primary and secondary health centers and hospitals. Understand how to prepare plans for marketing health services in order to improve patients' health care and quality of services.

- **Pharmacy informatics (1203734): 2 Credit hours**

Learn how pharmacist can utilize knowledge about drugs and their uses into modern information technology to improve patient care through ensuring safe and effective use of drugs, reduction of medication errors and support evidence-based health decisions leading to efficient use of resources and reducing costs. Gain knowledge about understanding, developing, implementing, and maintaining pharmaceutical information systems such as electronic prescribing, International Classification of Diseases (ICD) coding, patients' registry, and their health states electronically. Understand the importance of healthcare professionals' communication with each other as well as with patients safely, accurately, smoothly, and quickly by harnessing modern technology.

- **Pharmaceutical legislations and intellectual property (1203735): 2 Credit hours**

Learn the Jordanian Drug and Pharmacy Law and legislations to practice the profession of pharmacy in the Hashemite Kingdom of Jordan. Introduce to the principles of intellectual property and its applications in the pharmaceutical industry, both locally and internationally. Discuss the importance of intellectual property in the pharmaceutical research and development (R&D) issues, patent protection, data and trademark exclusivity. Understand these principles and their impact on the marketing strategies of the Jordanian pharmaceutical industry.

- **Pharmaceutical financial, strategic management and health policies (1203736): 3 Credit hours**

Learn the basic concepts of accounting and finance and its applications in managing pharmaceutical organizations' business. Focus on the accounting and financial programs used for inventory management, procurement, future planning, and investment opportunities. Prepare and analyze main financial data, financial statements and budgets in a simplified way. Study health financing policies, resources, and rational drug use. Expose to prepare technical reports for the National Health Accounts, and understand public health concepts and policies,

and the role of the pharmacist in promoting overall health of the community to help inform decision makers in their comprehensive health planning, optimum use of available resources and make decisions based on evidence. Understand the basic concepts of management and its functions including organizational charts, job descriptions and good governance in implementation and periodic evaluation followed by correction measures upon any deviation.

- **Regulatory affairs and quality (1203737): 3 Credit hours:**

Know technical and regulatory aspects relating to the preparation of pharmaceutical products files for submission to health authorities regarding involved in the registration of originator or generic drugs, laboratory analysis, pricing and marketing, through reviewing local, regional and global legislations and regulations, and understand the role of regulatory affairs department in pharmaceutical companies, in addition to medical devices and vitamins classification. Gain knowledge and skills necessary to implement or maintain quality assurance in producing human therapeutic products and its importance in drug manufacturing.

- **Advanced topics in pharmaceutical business (1203738): 3 Credit hours**

Learn about some specialized insights of one or more recent advances in pharmaceutical administration topics. The latter will be announced in advance to the students by the faculty member in charge such as:

Digital Health, Advanced Modelling, Customer Relationship Management (CRM), Managed Entry Agreements etc.

- **Supply chain management (1601782): 3 Credit hours**

Gain knowledge and skills on how to get the most from suppliers through using basic quality tools such as performance measurement, close loop corrective action, and supplier risk management. Explore broad integrated approach for strategic supply chain management along with purchasing management, business strategies, marketing strategies and manufacturing strategies.

- **International marketing (1604724): 3 Credit hours**

Understand the importance of international marketing, and differs from the activity of domestic marketing, the theoretical concepts for the motives and factors determining firms' behavior in the international markets, the effect of international environmental factors (Economical, Political, Social, Cultural and Competition) on decisions taken by international marketers. Learn ways and methods followed in analysing and evaluating opportunities in international marketing, planning for markets selection, markets penetration, and setting suitable marketing strategies. Gain practical and theoretical knowledge in practicing international marketing

activities such as planning policies, international product development, pricing policies, distribution policies, and international logistics.

- **Human resources management (1601715): 3 Credit hours**

Learn different functions and mission of a human resource management department in a business organization, and how to integrate theoretical foundation with managerial practice. Gain knowledge about improving the managerial practices regarding the human element, in the organizations in terms of their planning, staffing, development, Evaluation, compensation.....etc

- **Project management (1601717): 3 Credit hours**

Understand basic rules of managing projects and the advantages and disadvantages of these methods of getting things done. Discuss the problems of selecting projects, initiating them, and operating and controlling them. Present the demands made on the project manager and the interaction with the parent organization.

* There will a practical assignment for each student for each module that will be presented before the section as per the module nature accounts for 20% of the total marks

