

Course Syllabus Typical Format (CSTF)

First: Course Card:

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|----|---|---|---|
| 1 | College: Pharmacy | 2 | Department: Pharmaceutics |
| 3 | Academic Semester: First Semester | 4 | Academic year: 1444 H |
| 5 | Course Name: Pharmaceutics- 1 | 6 | Course code and number: PDPH0331 |
| 7 | Number of credit hours: 3 hours (2 theoretical/lecture, 1 lab) | | |
| 8 | Prerequisite (Name & code number): Not applicable | | |
| 9 | Course type: <input checked="" type="checkbox"/> Compulsory or <input type="checkbox"/> Elective | | |
| 10 | Course level: <input type="checkbox"/> University requirement, <input checked="" type="checkbox"/> Faculty requirement or <input type="checkbox"/> Department requirement | | |

Second: Faculty Member Card:

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|---|--|---|--|
| 1 | Name: Dr. Mona Kamel | | |
| 2 | Sections of the course that we teach all the course | | |
| 3 | Office phone: 4006 | 4 | Cell phone (Optional): 0548798401 |
| 5 | Office location and number: Faculty of medicine-Second Floor | | |
| 6 | Office hours: Tuesday, Wednesday, Thursday (12-1 PM) | | |
| 7 | Website: https://www.ut.edu.sa/ar/Staff/Pages/default.aspx?EmpNum=PDmB%2bgOFx861YFfoP3arCg%3d%3d | | |
| 8 | E mail: mqushawy@ut.edu.sa | | |

Third: Schedule of Lectures & Labs:

| Division number | Days | Time | Location (Building / Hall) |
|--------------------------|-----------|-------------------|----------------------------|
| Division 1 (PDPH0331) | Tuesday | 8:00-10:00 AM | 01-25-2-067 (Lecture) |
| | Tuesday | 10:00 AM-12:00 PM | 01-25-1-119 (Practical) |
| | Wednesday | 1:00-3:00 PM | 01-25-1-119 (Practical) |

Fourth: Course description:

Course description as stated in the Faculty or University guide (In Arabic and English):

The main purpose of the course is to give PharmD students a detailed background about pharmaceutical aspects of solid dosage forms such as tablets and capsule formulations, topical formulations, transdermal drug delivery systems and radiopharmaceuticals.

الهدف الاساسى لهذا المقرر هو اعطاء طلاب برنامج دكتور صيدلى معلومات مفصلة عن الاشكال الدوائية الصيدلانية الصلبة مثل الاقراص والكبسولات والمستحضرات الموضعية وانظمة توصيل الدواء عبر الجلد والمواد الصيدلانية المشعة.

Fifth: General course aims:

General course objectives (designate the sections and goals that are related to the course content)

- To demonstrate comprehensive knowledge and clear understanding of detailed information about tablets and capsules formulations.
- To describe detailed knowledge about topical formulations, rectal and vaginal suppositories.
- To recognize the transdermal drug delivery systems.
- To explain the use of radiopharmaceuticals in diagnostics and therapeutics purpose.

Cognitive Domain:

- Develop knowledge of students to rationally choose the formulations suitable for preparation of tablets and capsules formulations, topical formulations, rectal and vaginal suppositories and radiopharmaceuticals.

Psychomotor Domain:

- Prepare the student to accept all the characteristics of the profession and the physical work conditions.
- Demonstrate the exact work performance in the different fields as community pharmacists, clinical pharmacists, Industry pharmacistsetc.
- Illustrate the basic skills of dosage form formulation and selection.
- Evaluate the presentation skills.

Affective Domain:

- Illustrate the communication skills with the physicians.
- Illustrate the communication skills with the patients.

Sixth: Units schedule, topics, goals and temporal distribution of course during the semester:

| Week No. | Units | | Aims | Readings | | Keywords |
|----------|----------|---|--|---------------|-------|-------------------------------------|
| | Unit No. | Unit title | | Reference No. | Pages | |
| 1 | 1 | Capsules-1 | Hard gelatin capsules | 1 | 203 | capsule |
| 2 | 2 | Capsules-2 | Soft gelatin capsules Compendial requirements for capsules Inspecting, counting, packaging, and storing capsules | 1 | 203 | Capsule shell Filling sealing |
| 3 | 3 | Tablets-1 | Types of tablets | 1 | 225 | Multilayered tablet |
| 4 | | اليوم الوطني | | | | |
| 5 | 5 | Tablets-2 | Quality control tests of tablets | 1 | 225 | Dissolution, disintegration |
| 6 | 6 | Tablets-3 | Methods of tablet manufacture | 1 | 225 | Granulation |
| 7 | 7 | Topical dosage forms-1 | Anatomy of skin | 1 | 272 | Epidemis, demis, hypodermis |
| 8 | 8 | الاختبار النصفى Midterm exam | | | | |
| 9 | 9 | الاختبار النصفى Midterm exam | | | | |
| 10 | 10 | Topical dosage forms-2 | Ointment, cream, gel, past, plaster, | 1 | 272 | Ointment base |
| 11 | 11 | Suppositories and inserts-1 | Physiology of human rectum | 1 | 312 | Rectum |
| 12 | 12 | Suppositories and inserts-2 | Rectal suppositories Vaginal suppositories and inserts | 1 | 312 | Suppository base |
| 13 | 13 | Transdermal drug delivery system-1 | Factors affecting percutaneous absorption Percutaneous absorption enhancers | 1 | 294 | Percutaneous absorption |
| 14 | 14 | إجازة منتصف الفصل الدراسي الأول | | | | |
| 15 | 15 | Transdermal drug delivery system-2 | Advantages and dis-advantages of TDDSs | 1 | 294 | First-pass effect |
| 16 | 16 | Radiopharmaceuticals 1 | Introduction of radiopharmaceuticals | | | Radiation |
| 17 | 17 | Radiopharmaceuticals 2 | Therapeutic use of radiopharmaceuticals | 1 | 559 | Radiation |
| 18 | 18 | Practical exam | | | | |
| 19 | 19 | Final exam | | | | |
| 20 | 20 | Final exam | | | | |

Seventh: References and readings:

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| 1 | Reference (by full documentation authentication system in the scientific field): 1- Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems. 9th Edition, by Loyd V. Allen Jr., Nicholas G. Popovich, Howard C. Answel. Lippinkott Williams and Wilkins 2011. |
| Additional resources of readings with documented source (book, Website, studies, working papers, etc....) | |
| 1. Remington, the science and practice of pharmacy, 21st Edition, by Patrick J. Sinko. Lippincott Williams and Wilkins, 2006. | |
| 2. Pharmaceutics: The Design and Manufacture of Medicines, 3rd Edition, by Michael Aulton, Churchill Livingstone, 2007. | |

Eighth: Professor Policy in dealing with the students in the framework of laws and regulations and FAQ

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| 1 | Delay for attendance: University rules will be applied. |
| 2 | Cheating & Plagiarism: University rules will be applied. |
| 3 | Absenteeism: University rules will be applied. |
| 4 | Delay in providing the duties: 5% of the activity mark will be reduced for each day delay. |
| 5 | Checkout during the lecture: Allowed after permission. |
| 6 | Accommodation to sit inside the hall classroom: Allowed any place in the lecture room. |
| 7 | Failure to submit the exam on time: University rules will be applied. |
| 8 | The use of mobile devices: Prohibited |
| 9 | Eating & drinking: Prohibited |
| 10 | Talking during the lecture: Prohibited |

Ninth: Evaluation and Exams Calendar:

| Evaluation tool | Dates and duration | Scientific material involved in the Exam | Questions type | Marks out of 100 | Guidelines & instructions |
|--------------------------|--------------------|--|--|------------------|---|
| First Quiz | Fifth week | Lectures 1-3 | MCQ, Short essays, complete, give reason | 4 marks | Multitask exam measuring all kinds of the students talents with model answer from the lecture notes |
| Mid-term exam | Eighth-ninth week | Lectures 1-7 | MCQ, Short essays, complete, give reason | 30 marks | Multitask exam measuring all kinds of the students talents with model answer from the lecture notes |
| Students activity | Twelfth week | | Presentation, project or research | 6 marks | Measuring the presentation skills of students. |

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|-----------------------|--------------------------------|---|--|----------|---|
| Practical Exam | Eighteenth week | Practical experiments and theoretical parts | Practical | 20 marks | Theoretical concepts and practical experiments |
| Final exam | Nineteenth and twentieth weeks | Lectures 1-12 | MCQ, Short essays, complete, give reason | 40 marks | Multitask exam measuring all kinds of the students talents with model answer from the lecture notes |