**King Saud University**

**College of Pharmacy**

**Medication therapy management-2**

**Course Syllabus**

**I. GENERAL INFORMATION**

|  |  |
| --- | --- |
| **Course Number:** | PHCL 492 |
| **Course Title** | Medication therapy management-2 |
| **Lecture Hours Per Week** | 2 |
| **Credit Hours Per Semester** | 2 (2+0) |
| **Admission Particulars** | **Pre-requisites:** Medication therapy management-1-PHCL 436**Co-requisites:** None |
| **Course Director:** | **Dr. Mansour Almetwazi, BScPharm, PharmD, PhD.**Assistant professor, clinical pharmacy department **Office Location:** 1A201**Phone:** 00966114698081**Email:** mmetwazi@ksu.edu.sa **Office hours:** by appointment**Dr. Haya Almalag, MSc, PhD.**Assistant professor, clinical pharmacy department **Office Location:** 97 Bl 8 female campus **Phone:** 009668057859**Email:** halmalaq@ksu.edu.sa **Office hours:** by appointment |
| **Clock hours & Locations:** | **Days and time:** Sunday 8:00 -10:00 AM**Male campus:** TBC**Female campus:** TBC |

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| II. PARTICIPATING FACULTY |
| Faculty Name & credentials: Hadeel Alkofide MSc, PhD.Position: Assistant ProfessorOffice Location: Third Floor, room 28Phone: 00966118056894Email: halkofide@ksu.edu.sa Office hours: by appointment | **Faculty Name & credentials: Yazed AlRuthia, Pharm.D., PhD.****Position:** Assistant Professor**Office Location:** 2nd Floor, room 212**Phone:**+966114677483**Email:** yazeed@ksu.edu.sa **Office hours:** by appointment |
| Faculty Name & credentials: Bander AlBalkhi, Pham.D, Ph.DPosition: Assistant ProfessorOffice Location: 1A202Phone: +966114691878Email: bbalkhi@ksu.edu.sa Office hours: by appointment | **Faculty Name & credentials: Nouf Aloudah,****MSc, PhD.****Position**: Lecturer**Office Location:** 3rd floor, room 36**Phone**: +11(805) 0966 **Email:** naloudah@ksu.edu.sa**Office hours**: by appointment |

1. **COURSE DESCRIPTION**

This a 2 course series that introduce the Medication Therapy Management (MTMS) service to optimize therapeutic outcomes through appropriate drug use, enhanced patient understanding of appropriate drug use, increased patient adherence with prescribed drug therapies, and reduced risk of adverse events associated with drugs.

1. COURSE OBJECTIVES
2. Advocate the practice of Medication Therapy Management as an innovative solution for patient care among pharmacy students
3. Increase the students’ level to collaborate with patients and prescribers to resolve and analyze medication related complications and interactions
4. Participate in the pharmaceutical care system’s process for reporting and managing medication errors and adverse drug reactions.
5. **COURSE ABILITY OUTCOMES**

After studying this course, the student is expected to be able to:

1. Identify and report medication errors and adverse drug reactions to appropriate individuals and organizations (including institutional and federal).
2. Evaluate information obtained from adverse drug reaction and medication error reporting systems to identify preventable causes.
3. Recommend and implement actions to minimize the occurrence of adverse drug reactions and medication errors.
4. Communicate and collaborate with prescribers, patients, caregivers, and other involved health care providers to engender a team approach to patient care.
5. **RESOURCES**
6. Robert Wacher Understanding Patient Safety Mc Graw-Hill Professional 2007
7. Segal R Preventing medication Errors and improving drugs therapy outcomes; a management system approach CRC press 2003

**REQUIRED INSTRUCTIONAL MATERIALS:**

* All supplemental materials will be available to students electronically through blackboard. Class handouts and patient cases (when applicable) will be posted on the KSU blackboard server (<https://lms.ksu.edu.sa/>) at least 24 hours prior to the scheduled session date. It is the student responsibility to check the blackboard site regularly for any updates.
1. **COURSE POLICIES**
2. **ACADEMIC DISHONESTY/PLAGIARISM**
* Students are expected to demonstrate professionalism and honesty during this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students found in violation of such policy are subjected to disciplinary actions as per University Policy.
* Please read the manual of study and tests for undergraduate students and operational rule

 (لائحة الدراسة والاختبارات للمرحلة الجامعية والقواعد التنفيذية المعتمدة) <http://dar.ksu.edu.sa/Regulations>

* Please read the manual of students rights and duties (لائحة تأديب الطلاب بجامعة الملك سعود) <http://dar.ksu.edu.sa/Regulationss>
1. **CLASS PARTICIPATION AND PROFESSIONALISM**
* It is expected that all students come to class prepared by completing where applicable all assigned readings, online homework, and other assignments before class and ready to actively participate in classroom activities. Faculty will clarify and expand on the reading material. Use of phones is prohibited during class.
1. **GUIDELINES FOR E-MAIL COMMUNICATION**
* E-mail is often perceived as an informal method of communicating, but some basic rules of style or etiquette are expected. In general, rules of common courtesy for interaction with people should be used for any situation and on the internet it is especially important where, for example, body language and tone of voice must be inferred.
1. **All emails should be sent from your KSU account** **ONLY**
2. Mail should have a subject heading which reflects the content of the message.
3. Your message should begin with an appropriate salutation, including the name of the person being addressed, and end with the full name of sender.
4. Use mixed case and proper punctuation.
5. Current e-mail addresses for all students must be maintained in the Blackboard system**.** Each student must edit this in the "Personal Information" section of "Tools". Faculty will not be able to contact you if your email address is not updated and you could miss important information about courses.
6. **Check your e-mail daily.** Most information and communication from instructors will come via e-mail or will be posted on Blackboard under announcements.
7. **Failure to check email/Blackboard may result in you missing important assignments and subsequently affect your grade.**
8. Direct your request to the appropriate person, as indicated below. Please note that discussion board posts are preferred whenever your questions do not involve personal matters to reduce the number of individual emails.
* **Questions concerning lecture content:**
* First, post your question on the **discussion board of Blackboard**. All faculty teaching in this course have access to blackboard and will reply to questions posted. Other students may have the same question that you have or may have the answer. Please allow adequate time for faculty to respond.
* Inquire if the faculty member teaching that lecture has office hours and try to attend.
* If neither of the above steps adequately answers your question, email the faculty member teaching that lecture.
* **General course questions or if you are unsure of where to direct questions**:
* Contact the Course Director if your question involves a personal matter. Post general course related questions on the **discussion board** dedicated to the overall course logistics.
* **DO NOT** send message to "All Instructors".
1. **ATTENDANCE AND EXCUSED ABSENCE**
* In the case of illness or prolonged absence, it is the student’s responsibility to notify the faculty member and/or the Course Director within 5 days from the first date of absence. Exceptions to the five day notification period are rare and can only be approved by the Vice Dean of Academic Affair. With acceptable documentation from a student, an official memorandum will be issued notifying faculty of an excused absence. In the case of a legitimate excused absence, course instructors will make all reasonable attempts to assist the student to satisfy requirements of the course.
* Students missing 25% or more on attendance are forbidden from setting in the final exam per University Policy.
* If a student missed a midterm exam for an **ELIGIBLE** reason, Student must submit proper documentation within 2 weeks of scheduled exam time to the faculty member and the course coordinator.
* For any missed exams, student should fill a make-up exam form (pick up from department secretary) and obtain the necessary signatures and approvals from faculty member, the course director and head of the department.
* The faculty member has the right to determine the method for make-up exam, which can be any of the following:
	+ Increasing the percentage of the remaining exams to cover the missed exam
	+ Assigning the final exam a higher percentage to cover the missed exam for that student
	+ A make-up exam (the exam will be based on short answer questions)
	+ If the final is cumulative, the section relating to the missed examination material can be used as the grade for that missed exam.
1. **EXAMINATION AND GRADING CRITERIA**
2. Two midterm exams; mostly composed of multiple choice questions and true and false. Topics for each midterm and final are shown in the course schedule.
3. ASSIGNEMENTS & SUBMISSION (to course coordinator, please adjust according to your course)
* Late assignments/homework will be penalized by 15% reduction in grade per day late.
* Assignments is based on each topic is according to each topic instructor.
1. STUDENT PROJECT

The projects are divided in two main categories: education and research, both related to medication safety. The students will be provided with a list of topics on the 3rd week of the semester. Each group of students (4-5 students) need to select a category and a topic by the 5th week.

Education project:

You will be provided with a topic and you are required to develop a creative material and/or tool to inform patients and/or health care providers with the information to address the assigned topic.

Research project:

You will be provided with a research question and you are required to develop a method to address it or you will be provided with the research question and the method and you will be required to collect the data and/or do the analysis.

 For more details please contact course coordinators.

1. **GRADE DISTRIBUTION**

|  |  |  |
| --- | --- | --- |
| **Midterm (two midterms)** | 30 (15X2) | 30% |
| **Assignments and Participation** | 15 | 15% |
| **Project**  | 15 | 15% |
| **Final Exam** | 40 | 40% |
| **Total** | **100** | **100%** |

1. **CONFLICT RESOLUTION:**
* Any issues related to this course teaching, examinations and grading should be resolved with the course instructor promptly to ensure healthy learning atmosphere.
* Unresolved matter should be directed to the course coordinator. If matter is not yet resolved, please direct your complaint to the department head/Vice Head.
1. **CHANGE IN THE COURSE SYLLABUS OR GRADE DISTUBITION:** students will be notified with any changes to the course syllabus or grade distribution.
2. **GRADING SCALE:** grades will be earned based on KSU grading policy. the following scale:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Letter Grade | Score Achieved |  | Letter Grade | Score Achieved |
|  A+ | > 95% |  |  C+ | 75 - 79.99 % |
| A | 90 - 94.99 % |  | C | 70 - 74.99 % |
|  B+ | 85 - 89.99 % |  |  D+ | 65 - 69.99 % |
| B | 80 - 84.99 % |  | D | 60- 64.99 % |
|  |  |  | F | < 60% |

1. **COURSE SCHEDULE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week# | Date Hijri | Date Gregorian | Topic of lecture | Presenter |
| **Part I: Introduction** |
| Week 1 | 8 Jum 1 | 5 Feb | Introduction Importance and Prevalence of Medication Safety | TH/MMBroadcast  |
| Week 2 | 15 Jum 1 | 12 Feb |  Medication Use Process/System approach in medication use and safety | BBBroadcast  |
| **Part II: Adverse Drug Events (ADEs)** |
| Week 3 | 22 Jum 1 | 19 Feb |  ADEs: Overview, Culture of Safety & Classification  | MM/HM |
| **Project selection announcement**  |
| Week 4 | 29 Jum 1 | 26 Feb | ADE Detection Tools: Reporting | MM/HM |
| Week 5 | 6 Jum 2 | 5 Mar | ADE Detection Tools: Observation, Trigger tools   | YR/NO |
| **Project selection , submission of group names and project title, deadline 12 PM 5 Mar 2017** |
| Week 6 | 13 Jum 2 | 12 Mar | Root Cause Analysis  | YR/NO |
| **Week 7** | **20 Jum 2** | **19 Mar** | **Midterm Exam 1**  | **Topics WK1, 2, & 3**  |
| **Part III: Medication Error Prevention**  |
| Week 8 | 27 Jum 2 | 26 Mar | Non Technology Interventions  | HKBroadcast |
| **Week 9** | **5 Raj** | **2 Apr** | **Midterm semester break**  |
| Week 10 | 12 Raj | 9 Apr | Technology Interventions  | HKBroadcast |
| Week 11 | 19 Raj | 16 Apr | Prescribing, Dispensing & Administration Errors  | MMBroadcast  |
| **Project progress report, deadline 12 PM 16 Apr 2017** |
| Week 12 | 26 Raj | 23 Apr | Patient Role in Preventing Medication Errors Patient Safety Goals   | BBBroadcast  |
| **Week 13** | **4 Sha** | **30 Apr** | **Midterm Exam 2**  | **Topic WK 4, 5, & 6** |
| Week 14 | 11 Sha | 7 May | Research in Medication Safety | MMBroadcast |
| Week 15 | 18 Sha | 14 May | Medication safety officer- Role of Pharmacist | GSBroadcast  |
| **Week 16** | **25 Sha** | **21 May** | **Project discussion**  | **All faculty**  |
| **Final**  |  |  |  | **Topic WK 8, 10, 11,12, 13, 15, and 16** |

MM: Dr.Mansour Almetwazi; BB: Dr. Bander Balkhi; HM: Dr.Haya Almalag; NO: Dr.Nouf Aloudah; YR: Dr. Yazeed Alruthia; HK: Dr. Hadeel Alkofide; TH: Dr. Tariq Alhawassi; GS: Guest Speaker

**Course Binding Agreement (PHCL 492)**

The Course binding agreement has to be signed by each student and returned through the class leader to the course instructor before the third lecture. *Failure to submit this paper will attest to the student had read and agreed on the information contained therein*.

“I have read this syllabus, understand its implications (and have sought clarification of those parts that were unclear to me), and will abide by it.I understand that the course coordinator has the right to make alterations to the class and exam schedule as needed.”

Name of Student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

University ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Student: \_\_\_\_\_\_­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_