



**King Saud University**  
**College of Pharmacy**  
**PHCL 520**  
**Course Syllabus**

**I. GENERAL INFORMATION**

**Course Number**

<b>Course Title</b>	<b>Research Designs (PHCL 520)</b>
<b>Lecture Hours Per Week</b>	3
<b>Credit Hours Per Semester</b>	2 (2+0)
<b>Course Director:</b>	<b>Faculty Name &amp; credentials:</b> Hadeel Alkofide, MSc., PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 3rd Floor, Office # A 28 <b>Phone:</b> +118056894 <b>Email:</b> <a href="mailto:halkofide@ksu.edu.sa">halkofide@ksu.edu.sa</a> <b>Office hours:</b> by appointment <b>Faculty Name &amp; credentials:</b> Yazed Alruthia, PharmD, PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 1 <sup>st</sup> floor, Office # 1A 221 <b>Phone:</b> +114677483 <b>Email:</b> <a href="mailto:Yazeed@ksu.edu.sa">Yazeed@ksu.edu.sa</a> <b>Office hours:</b> by appointment
<b>Clock hours &amp; Locations:</b>	<b>Days and time:</b> Every Sunday from 1:00P.M.-3:00P.M.

**Participating Faculties**

<b>Faculty Name &amp; credentials:</b> Mansour Almetwazi, PharmD, PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 1 <sup>st</sup> Floor, Office # 1A 201 <b>Phone:</b> +966114698081 <b>Email:</b> <a href="mailto:mmetwazi@ksu.edu.sa">mmetwazi@ksu.edu.sa</a> <b>Office hours:</b> by appointment	<b>Faculty Name &amp; credentials:</b> Bander Albalkhi, PharmD, PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 1 <sup>st</sup> Floor, Office # 1A 237 <b>Phone:</b> +966114691878 <b>Email:</b> <a href="mailto:bbalkhi@ksu.edu.sa">bbalkhi@ksu.edu.sa</a> <b>Office hours:</b> by appointment
<b>Faculty Name &amp; credentials:</b> Saeed Alqahtani, PharmD, PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 1 <sup>st</sup> Floor, Office # <b>Phone:</b> +96614677471 <b>Email:</b> <a href="mailto:saeed@ksu.edu.sa">saeed@ksu.edu.sa</a> <b>Office hours:</b> by appointment	<b>Faculty Name &amp; credentials:</b> Hussain Alomar, MSc, PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 1 <sup>st</sup> Floor, Office # 1A 236 <b>Phone:</b> +966114673637 <b>Email:</b> <a href="mailto:halomar@KSU.EDU.SA">halomar@KSU.EDU.SA</a> <b>Office hours:</b> by appointment
<b>Faculty Name &amp; credentials:</b> Tawfeeg Alnajjar, PhD <b>Position:</b> Professor <b>Office Location:</b> 1 <sup>st</sup> floor, Office # 1A 232 <b>Phone:</b> +966114677492 <b>Email:</b> <a href="mailto:tnajjar@ksu.edu.sa">tnajjar@ksu.edu.sa</a> <b>Office hours:</b> by appointment	<b>Faculty Name &amp; credentials:</b> Omar Almohammed, PharmD, PhD <b>Position:</b> Assistant Professor <b>Office Location:</b> 1 A 36 in the college of dentistry <b>Phone:</b> +966114696998 <b>Email:</b> <a href="mailto:oalmohammed@KSU.EDU.SA">oalmohammed@KSU.EDU.SA</a> <b>Office hours:</b> by appointment

## II. COURSE DESCRIPTION

The main purpose of the course is to introduce students to quantitative and qualitative methods for conducting meaningful inquiry and research. Students will gain an overview of research intent and design, and methodology. Experimental, quasi-experimental, observational, survey, surveillance, and qualitative study designs will be reviewed. Methods for reliable and valid data collection and analysis will be covered.

## III. COURSE OBJECTIVES

**At the completion of the course series, the student should be able to:**

1. Develop a hypothesis, a research problem and related questions.
2. Frame the research problem with the correct research methodology.
3. Discuss epidemiologic and etiologic goals of healthcare research.
4. Identify and describe major research designs and methods used in the medical research.
5. Critically evaluate the medical literature with respect to study design, statistical analysis, and interpretation of results.
6. Differentiate among experimental, quasi-experimental, correlational, and observational study designs and methods.
7. Evaluate the feasibility of research proposals.

## IV. LEARNING RESOURCES

1. Epidemiology, 5<sup>th</sup> edition by Leon Gordis.
2. Essentials of Epidemiology in Public Health, 3<sup>rd</sup> edition by Ann Aschengrau & George R. Seage.
3. Designing Clinical Research, 4<sup>th</sup> edition by Stephen B. Hulley.
4. Qualitative Inquiry and Research Design: Choosing among Five Approaches, 3<sup>rd</sup> edition by John W. Creswell.

**\*Other resources might be provided throughout the semester by course faculty.**

### **REQUIRED INSTRUCTIONAL MATERIALS:**

- All supplemental materials will be available to students electronically through blackboard. Class handouts 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. **PPT slides will not be uploaded prior to lecture so you can read about the lecture's topic before you come to class.**

## V. COURSE POLICIES

### **A. 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>



## B. 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.

## C. 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.

### **All emails should be sent from your KSU account ONLY**

1. Mail should have a subject heading which reflects the content of the message.
2. Your message should begin with an appropriate salutation, including the name of the person being addressed, and end with the full name of sender.
3. Use mixed case and proper punctuation.
4. 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.
5. **Check your e-mail daily.** Most information and communication from instructors will come via e-mail or will be posted on Blackboard under announcements.
6. **Failure to check email/Blackboard may result in you missing important assignments and subsequently affect your grade.**
7. 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".

#### **D. 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 Affairs. 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 7 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.

### **VI. EXAMINATION AND GRADING CRITERIA**

#### **A. EXAMS/QUIZZES**

- One midterm exam and a non-cumulative final exam will be administered throughout this module. The final course grade will be calculated based on the total number of points earned on each examination in comparison to the total number of points available.
- Online quizzes will assess your understanding of general concepts found in the recommended class course materials.
- Make up quizzes will NOT be possible under any circumstance.
- The final exam is non-cumulative and includes the course materials that were covered after the midterm exam.
- Participation is mandatory.

#### **B. ASSIGNMENT & SUBMISSION**

- All students are required to take the online quizzes in a specified timeframe. Failure to take the quiz within that timeframe will result in a grade of ZERO for that quiz unless the student presents a proof of a legitimate excuse (e.g., death of a first-degree relative).

**C. GRADE DISTRIBUTION**

<b>First Midterm</b>	15 points	<b>15%</b>
Second Midterm	25 points	<b>25%</b>
Pop quizzes	20 points (8 X 2.5 points)	<b>20%</b>
<b>Final Exam (noncumulative)</b>	40 points	<b>40%</b>
<b>Total</b>		<b>100%</b>

**D. 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.

**E. CHANGE IN THE COURSE SYLLABUS OR GRADE DISTRIBUTION:** students will be notified with any changes to the course syllabus or grade distribution.

**F. 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%



## A. COURSE SCHEDULE:

Week	Date	Time	Lecture	Topic	Instructor
1	01/06/2019	1:00P.M-3:00P.M.	1	Biomedical Literature	T.N
2	01/13/2019	1:00P.M-3:00P.M.	2	Overview of Research	T.N
3	01/20/2019	1:00P.M-3:00P.M.		First Midterm ( <b>Dr.Alnajjar's lectures only</b> )	
3	01/27/2019	1:00P.M-3:00P.M.	3	Experimental and Quasi-Experimental Designs	YA
4	02/03/2019	1:00P.M-3:00P.M.	4	Cohort and Case Control Studies	MA
5	02/10/2019	1:00P.M-3:00P.M.	5	Cross Sectional Studies and Other Study Designs	BB
6	02/17/2019	1:00P.M-3:00P.M.	6	Systematic Reviews and Meta-analyses	HK
7	02/24/2019	1:00P.M-3:00P.M.		Second Midterm Exam ( <b>Lectures 3-6</b> )	
8	03/03/2019	1:00P.M-3:00P.M.	7	Health-Related Theories in Research	OA
9	03/10/2019	1:00P.M-3:00P.M.	8	Constructs Validity and Reliability	OA
10	03/17/2019	1:00P.M-3:00P.M.	9	First in humans and Early Clinical Trials	SA
11	03/24/2019	1:00P.M-3:00P.M.	10	Bias and Confounding in Quantitative Research	YA
12	03/31/2019	1:00P.M-3:00P.M.	11	An Introduction to Qualitative Research	HO
13	04/07/2019	1:00P.M-3:00P.M.	12	Data Collection and Analysis in Qualitative Research	HO
14	04/14/2019	1:00P.M-3:00P.M.	13	An Overview of Mixed Methods	HO
15	04/21/2019	1:00P.M-3:00P.M.		Final exam	

**TN:** Prof. Twfeeq Alnajjar, **YA:** Dr.Yazed AlRuthia, **SA:** Dr.Saeed Alqahtani, **MA:** Dr. Mansour Almetwazi, **BB:** Dr.Bander Albalkhi, **HK:** Dr.Hadeel Alkofide, **HO:** Dr.Hussain Alomar, **OA:** Omar Almohammed



## **Course Binding Agreement (PHCL 520):**

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: \_\_\_\_\_