



**King Saud University  
Applied Medical Sciences College  
Quality and Development Unit**



### Course Syllabus

<b>Course title and code:</b>	Independent study- RHS 481	
<b>Department:</b>	Rehabilitation Health Sciences	
<b>Program in which the course is offered:</b>	Physical Therapy Program	
<b>Credit hours:</b>	Theory - 2	
<b>Total contact hours per semester:</b>	45 hours	
<b>Level at which this course is offered:</b>	level 8	
<b>Course prerequisites:</b>	RHS231, RHS323, RHS327	
<b>Time:</b>	Wednesday 8-10 AM	
<b>Location:</b>	Female campus	
<b>College member responsible for the course</b>	<b>Dr. Rehab Farrag Gwada</b>	<b>Dr. Adel Abdullah Alhusaini</b> Pediatrics Neurorehabilitation Consultant
<b>Contact information:</b>		
<b>Office Number:</b>	<b>162</b>	<b>Room 2061, 2ed floor, CAMS, KSU</b>
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<b>Office hours:</b>	<b>10-11am Sunday, 10-1am Monday, 10-12am Tuesday</b>	<b>12:30-3 pm Sunday, 10-12 pm Thursday</b>
<b>Course Description</b>	This course introduces the need for conducting research in the field of physical therapy, stressing the importance of evidence-based practice. The core of this course will be to teach the students how to conduct a scientific research, starting with a relevant clinical question and ending with how to interpret and analyze the research findings	
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1- Identify research question and its bases.</li> <li>2- Critically appraise the relevant literature review.</li> <li>3- Develop skills in writing a research proposal (following the traditional sequence used in publications).</li> <li>4- Critique research articles.</li> <li>5- Apply the selected research idea.</li> <li>6- Analyze the results of the research.</li> <li>7- Practice presenting their research orally (platform presentation) and /or visually (poster presentation).</li> </ol>	
<b>Teaching strategies</b>	According to research and best practices, Differentiated teaching strategies are required to verify student learning, align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual	
<b>Learning Resources</b>		
<b>Required Text (s)</b>	<ul style="list-style-type: none"> <li>➤ Currie DP: Elements of Research in Physical Therapy, 3rd ed. Williams &amp; Wilkins, 1999.</li> <li>➤ Domholdt E: Physical Therapy Research: Principles and Applications, 2nd ed. Wb Saunders Company, 2000.</li> <li>➤ French S, Reynolds F and Swain J: Practical Research: A guide for Therapists, 2nd ed. Butterworth Heinemann, 2002.</li> <li>➤ Porter S, Tidy's physiotherapy, 13th ed, Butterworth Heinemann, 2003.</li> </ul>	
➤ <b>Essential References</b>		
➤ <b>Recommended Journals</b>	➤ Journal Periodic articles.	
➤ <b>Electronic Materials and Web Sites</b>	➤ To be attached upon need	

## Topics to be covered

List of Topics	due Week	Contact Hours
<b>Orientation</b> <ul style="list-style-type: none"> <li>- Establishment of Class Ground Rules.</li> <li>- Assignment of head student.</li> <li>- Collection of students' contact information.</li> <li>- Overview of the course goals and specification:               <ul style="list-style-type: none"> <li>o Why it is important to study this course?</li> <li>o What are your expected outcomes from this course?</li> </ul> </li> <li>- Explanation of the students' assignments</li> </ul>	1st weeks	2
<b>Research Introduction</b> <ul style="list-style-type: none"> <li>- What is research?</li> <li>- Reason for developing research (Why research?).</li> <li>- Types of research (Basic and applied).</li> <li>- Approaches to research (Quantitative/ Qualitative).</li> <li>- Who should research?</li> <li>- Ethical considerations.</li> <li>- Barriers of research</li> </ul>	2 <sup>nd</sup> weeks	2
<ul style="list-style-type: none"> <li>- Identifying a research problem</li> <li>- Developing answerable research question (s).</li> <li>- Dependent and independent variables.</li> <li>- Hypotheses</li> <li>- <b><u>Assignment 1:</u></b> Problem statement and Research question</li> </ul>	3 <sup>rd</sup> week	2
<ul style="list-style-type: none"> <li>- Selection of subjects (sampling)</li> <li>- Sample size.</li> <li>- Research design</li> <li>- Reliability and Validity :( Definitions, Types of Reliability, Measurement of reliability&amp; validity)</li> </ul>	4 <sup>th</sup> , 5 <sup>th</sup> week	4
<ul style="list-style-type: none"> <li>- Literature review</li> </ul>	6 <sup>th</sup> week	2
<ul style="list-style-type: none"> <li>- Oral presentation of the research proposal</li> </ul>	7 <sup>th</sup> week	2

<p><b>Measurement theory:</b></p> <ul style="list-style-type: none"> <li>- Measures of central tendency (mean, median, mode).</li> <li>- Measures of variation (range, variance, standard deviation, coefficient of variation, percentiles).</li> <li>- Normal distribution</li> <li>- Types of data</li> <li>- Types of statistics (parametric &amp; non-parametric)</li> <li>- Selection of statistical design according to research design (t-test, ANOVA, correlation ...)</li> <li>- <b>Assignment 2:</b> students presents summary of relevant literature orally</li> </ul>	8 <sup>th</sup> weeks	2
<ul style="list-style-type: none"> <li>- Vacation</li> </ul>	9 <sup>th</sup> week	2
<p><b>Writing process:</b></p> <ol style="list-style-type: none"> <li>1. Title and abstract</li> <li>2. Introduction</li> <li>3. Literature review</li> <li>4. Methodology</li> <li>5. Discussion</li> <li>6. Results</li> <li>7. Conclusion and recommendation</li> <li>8. References</li> <li>9. Appendices</li> <li>10. Arabic summary</li> </ol>	10 <sup>th</sup> week	2
<p><b>Cont. Writing process:</b></p> <ul style="list-style-type: none"> <li>- Dissemination: <ul style="list-style-type: none"> <li>o Numerous ways of disseminating the research findings.</li> <li>o Reasons for disseminating research.</li> <li>o Presentations (verbal and poster).</li> </ul> </li> <li>- <b>Assignment 3:</b> Final Literature review (Written)</li> </ul>	11 <sup>th</sup> weeks	2
<ul style="list-style-type: none"> <li>- <b>Midterm exam</b></li> </ul>	12th week	2
<p><b>Assignment 4:</b> Article critique</p>	13 <sup>th</sup> week	2
<p><b>Write up First draft of the thesis</b></p>	14 <sup>th</sup> week	2
<p><b>Students present their final thesis</b></p>	16thweek	2

## Schedule of Assessment Tasks for Students During the Semester

Assessment task	Week due	Proportion of Final Assessment
research question /problem	4 <sup>th</sup>	5%
final Written Literature review	10 <sup>th</sup>	20%
Midterm exam (written)	12 <sup>th</sup>	20%
Article critique	13 <sup>th</sup>	5%
proposal presentation	7 <sup>th</sup>	10%
Final exam (final written version of research manuscript/presentation &discussion)	16 <sup>th</sup>	40% (30% / 10%)

### Required Assignments:

Week	Assignments	evaluation	Week due
4 th	research question /problem	5%	4th
10 <sup>th</sup>	final Written Literature review	20%	9 <sup>th</sup>
13 <sup>th</sup>	Article critique	10%	11th
7 <sup>th</sup> , 16 <sup>th</sup>	Presentation(proposal , final)	20 % ( 10%, 10%)	

- **Criteria for evaluation:**

- The ability to Search certain literature in the area of interest.
- skills in writing a research proposal (following the traditional sequence used in publications).
- Application of the selected research idea and the ability to Analyze the results of the research.
- oral presentation of their research.

- **Course rules:**

- **Class Leader:**

- Name:

- **Duties of the Class leader:**

- The Class Leader will serve as the direct liaison between the course instructors and the students.
- Ensure that all students' duties are assigned and completed as required.
- Notify course instructor immediately when any student fails to complete a required component of the class.
- Serve as role model for the students and members in both manner and dress.
- Ensure that all students are aware and informed of their duties
- Ensure that both lab and classroom environment are always left in a neat and orderly fashion.

- **More comments for instructors:**

- Students are expected to attend each session and be on time. The regular attendance is critical for doing well in this course. If you are absent in the class, make arrangements to obtain the notes from another student. Additionally, each student will be responsible for signing her name ONLY.
- Any disruptive activity (e.g. use of cell phones, side conversations) in the classroom is prohibited. If the instructor required disruptive students to leave the classroom, the student remains responsible for all the information and will be marked absent for the class session. The dean will impose sanctions for unprofessional behavior.
- There will be **no bonus** at the end of course.