

## DULA Doctorate Syllabus DRM 721, AOM Research: Principles

### COURSE INFORMATION

Course Number, Title:	DRM 721, AOM Research: Principles
Number of Hours/Units:	30 hours/3 units
Prerequisites:	None
Course Schedule:	<i>[type your class day and time in here, for example: Thursday, 10AM-1PM]</i>
Course Instructor (email):	<i>[type your name, degree title and email address in here, for example: xxx, L.Ac., abcde@dula.edu]</i>
Instructor Office Hours:	<i>[type your available time to meet outside of classroom hours, for example: "After class, or by appointment"]</i>

### COURSE DESCRIPTION

This course is designed to enable our graduates to demonstrate knowledge and skills in clinical research. The course provides an understanding of currently accepted research standards and methodology, as well as the current scientific literature in the field. The course examines the research methodology utilized in contemporary biomedical sciences for the assessment of clinical efficacy and physiological mechanisms related to Oriental medicine. The course covers the basics of bio-statistical analysis and common statistical tests that are used to conduct biomedical research, including probability theory, population sampling, descriptive statistics, inferential statistics, confidence intervals, statistical significance, hypothesis testing, and comparison of paired and unpaired groups. The course also develops further the ability to critically analyze the quantitative portion of research from a consumer's perspective.

### LEARNING OBJECTIVES

- Identify the principles of scientific research
- Critically evaluate research articles and reviews
- Design and report results of a clinical study
- Analyze and appraise clinical research data
- Appreciate the methodological challenges in AOM research

### CORRELATION OF THE CLASS TO THE DAOM EDUCATIONAL OBJECTIVES

- ( ) Competently apply the advanced diagnosis and treatment skills of the program's core Oriental Medicine curriculum
- ( O ) Demonstrate competency in critical application of evidence-based medicine towards research, scholarship, and patient-care
- ( ) Demonstrate competency in application of advanced Traditional Korean Medicine theories and modalities within the program's specialty
- ( ) Demonstrate ability to educate others in Acupuncture and Oriental Medicine
- ( ) Demonstrate competency in integrative medical practices to advance Oriental Medicine and effectively collaborate on patient care with other healthcare systems
- ( ) Demonstrate competency in engaging in "best practices" in patient-centered clinical management

**TEACHING METHODS**

Lecture	In-class discussion	Hands-on practical training	Demonstration	Oral Presentation	Audio and/or visual tutorial segments	Off-campus field trips	Off-campus speakers/consultants
0	0		0	0			

Other (explain): \_\_\_\_\_

**INSTRUCTIONAL MATERIALS**

Required Text(s):

*Principles and Practice of Clinical Research*. Fourth Edition. John I. Gallin, Frederick P. Ognibene, Laura Lee Johnson, eds. Academic Press, 2017.

**[type the required texts in here]**

Recommended Text(s):

*Research Methodology: A Step-By-Step Guide for Beginners*. Ranjit Kumar. Sage Publications, 2014

*Textbook of Clinical Trials*. Second Edition. David Machin, Simon Day, Sylvan Green eds. Wiley & Sons: 2007.

*Designing Clinical Research*. 4<sup>th</sup> Edition. Stephen B. Hulley et al. Wolters Kluwer. 2013.

*Munro's Statistical Methods for Healthcare Research*. 6<sup>th</sup> Edition. Stacey B. Plichta et al. Wolters Kluwer, Lippincott Williams and Wilkins. 2013.

*Acupuncture Research: Strategies for Establishing an Evidence Base*. MacPherson H, Hammerschlag R, Lewith G, Schnyer R (eds). Churchill Livingstone/Elsevier. 2007.

*Clinical Research in Complementary and Integrative Medicine: A Practical Training Book*. Witt C and Lunde K. Churchill Livingstone, 2010.

In-class Text:

**[type in-class handouts or other materials here]**

Online resources:

NIH Clinical Center. Introduction to the Principles and Practice of Clinical Research. Video and Handout Archive. <https://ippcr.nihtraining.com/>

**[type online resources here]**

**COURSE REQUIREMENTS**

Course Requirement Clarification	Percentage Breakdown for Final Grade
<b>Regular Attendance</b> (mandatory - please refer to attendance policy mentioned in this syllabi)	10%
<p><b>Out-of-classroom work:</b>  <i>To successfully complete the course, student is also required to plan studying minimum of 2 hours out-of-class for each 1 hour of academic in-class hour; and half an hour out-of-class for each hour of clinical training.</i></p> <p>Read and analyzes the required texts and various references including published scientific articles, papers, case study reports, related to the topic that you learnt in the class and also for the topic of the following week class. Student’s critical thinking, opinions and discussions in each of the following classes are important as part of the learning process in the doctoral program.</p> <p><i>[type the type of assignment in here]</i></p>	<p><i>[type the percentage here, for example: 20%]</i></p>
<p><b>Midterm Assignment:</b>            Oral Presentation: Critical analysis on the current published research studies related to AOM            Student select one of their interest AOM topic and research the related published clinical trial studies related to their selected topic. Student will then complete this paper project by providing their review, analysis and original opinions regarding to this study. Paper will then be orally presented in the class followed by Q/A and discussions among students and instructor.</p> <p><i>[type your midterm assignment in here]</i></p>	<p><i>[type the percentage here, for example: 35%]</i></p>
<p><b>Final Assignment:</b>            Oral Presentation: Various designs of the research studies            Design 3 different research proposals with any topics related to AOM using 3 different research design including: case study design, cohort study design, cross-sectional study design. Present your project in the class as in oral presentation, with your comments in regards to the differences, appropriate applications, strength and weakness among these studies.</p> <p><i>[type your final exam assignment in here]</i></p>	<p><i>[type the percentage here, for example: 35%]</i></p>
<b>Total:</b>	<b>100%</b>

**COURSE SCHEDULE**

Week	Date	Topic	Out-of-classroom Work – Minimum 6 hours / week
1	<i>[type date here]</i>	Introduction to and overview clinical studies	
2	<i>[type date here]</i>	Type of studies: Case-Control Study, Cohort Study, Cross-Sectional study, Clinical Studies	
3	<i>[type date here]</i>	Bio statistical analysis and common statistical test	

4	[type date here]	Control Bias: Selection Bias, Recall Bias, Sampling Bias, Late Look Bias, Lead Time Bias, Confounding bias	
5	[type date here]	<b>MIDTERM ORAL PRESENTATION</b>	Review and revision of the midterm assignment
6	[type date here]	Type of Studies: Systematic Review & Meta-Analysis	
7	[type date here]	<ul style="list-style-type: none"> <li>• Incidence vs Prevalence</li> <li>• Precision vs Accuracy</li> <li>• Quantifying Risk: Odds Ratio, Relative Risk, Attributable Risk</li> </ul>	
8	[type date here]	Biostatistical analysis and common statistical test Statistical Error Types: Type I, Type II	
9	[type date here]	Statistical Distribution: Normal distribution, SD, Positive Skew, Negative Skew Statistical hypotheses	
10	[type date here]	<b>FINAL ORAL PRESENTATION</b>	Review and revision of the final assignment

### GRADING POLICY & EVALUATION

P	(pass) Satisfactory completion of all required coursework. A percentage of 75% will be required to receive a Pass
F	(fail) Unsatisfactory completion of coursework.
W	(withdraw)
I	(incomplete)
IP	(in progress)

Please reference the DAOM Catalog for more information regarding the University's grade point system.

### ATTENDANCE POLICY

University policy requires that attendance is factored in as at least 10% of a student's final grade. Students with more than 2 unexcused absences will be considered to automatically fail a course, and 3 marks of tardiness will be counted as 1 absence.

Please reference the DAOM Catalog for more information regarding this policy.

### ACADEMIC DISHONESTY

Academic dishonesty includes providing or receiving answers from other students during or after an examination, plagiarism, knowing use of illegally copied educational material in any format, using informational aids such as "crib sheets" or other types of notes during an examination (if not allowed), or anything else that might reasonably be construed as cheating. Students who are found to be academically dishonest will automatically receive an "F" in that particular

course and are subject to dismissal or suspension for 1 quarter, and may be placed on administrative probation.

## STUDENTS WITH DISABILITIES

Dongguk University Los Angeles is committed to providing support services to achieve equal access to the education experience. The Student Services Coordinator is available to provide assistance for students who exhibit significant difficulties due to a disability. DULA will support students to understand his/her limited abilities and compensate for them with ADA accommodations and alternative resources as well. Registration for assistance from the Student Services Coordinator is on a voluntary, self-identifying basis. However, services are only available after a student has registered and presents current documentation of the disability from an appropriate specialist or physician. All information and documentation are confidential.

*Please refer to the DAOM Catalog for more information regarding this policy and procedure.*

## SPECIAL NOTES

*[type here for additional notes]*