Clinical Research Methods  
BIOL F497  
Fall 2018 - 3 credits

Professor: Robert H. Coker, PhD, FACSM  
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Office: Murie 323D  
Office Hours: By appointment

Overview:  
Clinical research utilizes a variety of scientific approaches originally elicited from initial studies using basic science and/or pre-clinical models, or pilot studies using small clinical trials. A background and further understanding of this field will be derived from study of the scientific literature in this area.

Course Description:  
This course will focus on a specific clinical investigation that may include pharmacological, surgical, nutritional and/or behavioral interventions on health and disease. Supplemental journal articles and other readings will be assigned or searched on PubMed throughout the semester.

Prerequisites:  
BIOL 214: Human Anatomy and Physiology

Course Goals:  
1. Complete all necessary training for regulatory compliance in clinical research.  
2. Contribute to abstract or manuscript development for presentation and/or publication.  
3. Gain an understanding of participant recruitment in clinical research trials.  
4. Assist in the completion of data analysis/interpretation.

Course Objectives:  
1. Ability to work with diverse populations including recruitment, enrollment and compliance assessment.  
2. Experience in the process conducting a clinical research study from recruitment through publication

Course Calendar:  
1. Weekly mentoring as described previously  
2. 1st draft of the paper will be done by mid-term of the semester  
3. Final draft will be submitted by end of semester

Timeline for course

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<th>September 28, 2018</th>
<th>October 26, 2018</th>
<th>November 30, 2018</th>
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<tbody>
<tr>
<td>Compliance training completed</td>
<td>Complete data analysis</td>
<td>Complete 1st draft of abstract</td>
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<tr>
<td>Begin work on data analysis</td>
<td>Read assigned articles</td>
<td>Contribute to manuscript</td>
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<tr>
<td>Read assigned research articles</td>
<td>Begin work on abstract</td>
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Required Textbook: None; Scientific articles that are specific to the topic of interest in the field of clinical research will be available via Blackboard.

Instructional Methods

1. Mentoring sessions will follow regular lab meetings.
2. Mentoring will include training in data interpretation and statistical analysis.
3. Analysis and guidance of writing skills will be conducted on a regular basis. Grading: Completion of regulatory compliance training deemed necessary for participation in clinical research will represent 30 points out of 100 points. Completion of data analysis on a selected topic will represent 40 points out of 100 points. A significant contribution to an abstract and/or manuscript will represent 40 points out of 100 points. Therefore, the sum of compliance training, data analysis and scholarly contribution will equal 100 points.

Calculation of Grade: In brief, A= 90-100; B=80-89; C=70-79; D=65-69, F= 64 or below. Grades will represent an average of course requirements.

Honor Code and Plagiarism: Students will be expected to uphold the UAF standard of conduct for students relating to academic dishonesty. Students will assume full responsibility for the content and integrity of the academic work submitted by them during the course. For the student code or additional information, please use the following URL http://www.uaf.edu/catalog/current/academics/regs3.html

UAF Disabilities Services: The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (203 WHIT, 474-7043) to provide reasonable accommodation to students with disabilities. ** If students require any assistance due to documented disability, please make the Professor aware of this important need by the 2nd week of semester, and they will make the necessary accommodations.