**KINE 4760: Introduction to Exercise Science Research**



*Auburn University, Fall 2019 (3 credits)*

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| **Class Meeting:** |
| MWF, 11:00 – 11:50 (section 3)  MWF, 12:00 – 12:50 (section 4)  Mell Classroom Building, Room 3510b (section 3, 11 AM)  Draughton Library, Room 4133 (section 4, 12 PM) |
| **Course Professor:** |
| Dr. Kristina Neely |
| **Office Hours:** |
| Mondays, 2-3 PM, and by appointment  Office: Kinesiology Room 282 |

**SYLLABUS**

**Course description**

This course introduces research design, statistical reasoning, and interpretation of the health sciences literature. Topics include protection of human subjects, the research question, research methods and issues of measurement, models of experimental and non-experimental designs, and an overview of statistics. The topics provide a basis for understanding and interpreting the literature for use in evidence-based practice.

***The overarching goal of this course is for you to become an educated consumer of scientific research. Please find a list of specific course objectives on Canvas.***

**Office hours**

Office hours Mondays, 2-3 PM, and by appointment. I am happy to meet with you between the hours of 8 AM and 5 PM, Monday through Friday. Please send me an email proposing at least two day/times that work for you. Grades will not be discussed by email and require an in-person meeting.

**Required texts**

**Title:** Introduction to Research and Medical Literature for Health Professionals

**Authors:** J. Glenn Forister, J. Dennis Blessing

**Edition:** 5th Ed.

**Publisher:** Jones & Bartlett Learning

**Title:** The Publication Manual of the American Psychological Association.

**Authors:** American Psychological Association.

**Edition:** 6th Ed.

**Publisher:** American Psychological Association.

**\*Note:** This text is available at RBD library circulation desk (for in-house use) and the majority of the information is available at the link below. Therefore, it is not necessary that you purchase a copy of this resource.

<https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html>

**Canvas**

This course relies on Canvas: all course materials are on Canvas and it is our primary means of communication. Students are expected to check Canvas and Auburn email once per day for updates and/or announcements. If you have difficulty accessing Canvas, please contact the Office of Information Technology (OIT)) [844-4944] immediately as your access is imperative for success in this course.

**Course schedule**

The course schedule was carefully developed to balance the time you spend in and out of class. Course meetings may be cancelled to provide time to meet with your team and/or me, or to complete course activities. I recommend that you meet with your team during the course meeting time. The classroom will always be available to you during the class meeting time.

**Proviso**

Dr. Neely may make changes to the syllabus if necessary. All changes will be announced in class and will be posted in writing on Canvas.

**EVALUATION**

Attendance and preparation are essential for success in this course. Students are required to attend all scheduled class meetings, as well as meetings with your group, Mr. Todd Shipman, and me.

Please read the following policies carefully:

* In-class activities and participation comprise a large portion of your grade. These activities are based on the day’s content and are often completed in groups. Thus, make up activities will likely be in an alternate format.
* **Make up activities are only provided in the event of an excused absence**. Please see the Tiger Cub for a full description of these circumstances. In brief, these include, serious illness of the student or immediate family of the student; death of a member of the student’s family; trips for members of student organizations sponsored by an academic unit, course, or intercollegiate athletic events; religious holidays, subpoenas for court appearances.
  + **Notify me in writing prior to such absences. In no case will an absence be excused if it is reported more than one week from the absence. Sufficient documentation will be required.**
* Students are responsible for all material covered in class. If you miss for any reason, you should take the following steps:
  + Get notes from two classmates with different note-taking styles.
  + Read the course announcements and posted lecture notes.
  + If you have specific questions about the material, email Dr. Neely to set up a meeting.

**Assignments & Quizzes**

This course has many small assignments designed to help you learn the steps in the research process. We will focus on interpreting scientific papers, writing brief literature reviews, and integrating peer feedback. Approximately 70% of the points in this class come from team-based research projects, such as an annotated reference list, short literature reviews, and peer reviewing. All assignments and quizzes are administered via Canvas. You can find all assignment details and deadlines on Canvas.

**This course is graded.  The grading scale is as follows:**

A  (4.0)      90 – 100%

B  (3.00)    80 – 89.99%

C  (2.00)    70 – 79.99%

D  (1.00)    60 – 69.99%

F  (0.00)    less than 60%

**COURSE POLICIES**

**By remaining enrolled in this course, you agree to abide by all course policies.**

All policies set forth in the Student Policy Handbook apply to this course.

(<http://www.auburn.edu/student_info/student_policies/>).

**Academic Honesty:**

All portions of the Auburn University Student Academic Honesty code (Title XII) found in the Student Policy eHandbook at <http://www.auburn.edu/student_info/student_policies/> will apply to this class. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

**Classroom Behavior**

The Auburn University Classroom Behavior Policy is strictly followed in the course; please refer to the Student Policy eHandbook at <http://www.auburn.edu/student_info/student_policies/> for details of this policy.

**Excused Absences**

Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student’s immediate family, death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for University classes, trips for participation in

intercollegiate athletic events, subpoena for a court appearance and religious holidays. Students who wish to have an excused absence from this class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required.

**Emergency Contingency**

If normal class activities are disrupted due to illness, emergency, or crisis situation (such as an H1N1 flu outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

**Plagiarism**

All quizzes, assignments, and any other written work must reflect the individual efforts of each student. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee. There is a great deal of writing in this class and I expect strict adherence to appropriate citations and correct paraphrasing (verb and the sentence structure must be changed). Plagiarism detection programs will demonstrate where paraphrasing and summarizing needs improvement on the project drafts. The final version of your proposal should be problem free. There is no quoting in scientific writing. You must paraphrase or summarize.

**Copyright Statement**

Copyright laws protect all course materials students receive or to which students have online access. Students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials without the instructor’s express permission is strictly prohibited. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University’s Code of Conduct and/or liable under Federal and State laws.

**Confidentiality**

The federal Family Educational Rights and Privacy Act (FERPA) of 1974 identifies the rights of students and their families with respect to student educational records kept by institutions.

**Students with Disabilities**

Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours to discuss your accommodations. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).

**Cell Phones**

As a courtesy to everyone, please turn off your cell phone during class. If you have a compelling reason for leaving your phone on, please let me know at the beginning of class. Do not text or video chat during class.

**Best Work**

Students are expected to show evidence of thorough reading of assigned materials. Please take pride in your work and be motivated to do your best work in this class: if you are, you will gain the maximum benefit from the course.

**Professionalism**

As faculty, staff, and students interact in educational settings, they are expected to demonstrate professional behaviors as defined in the College of Education’s conceptual framework. These professional commitments or dispositions are as follows: 1) engage in responsible and ethical practices, 2) contribute to collaborative learning communities, 3) demonstrate a commitment to diversity, and 4) model and nurture intellectual vitality.

CO**URSE SCHEDULE**

The course schedule was designed carefully to balance your work in and out of class. Many assignments will be completed during the class session, thus your attendance is critical to your success in this course. The following content schedule provides a road map for this course. More details are provided on Canvas.

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| **Week** | **Date** | **Content** |
| **1** | Mon Aug 19 | Course Introduction |
| Wed Aug 21 | Understanding research |
| Fri Aug 23 | Understanding research |
| **2** | Mon Aug 26 | Research Ethics |
| Wed Aug 28 | Research Ethics |
| Fri Aug 30 | No class, do CITI training |
| **3** | Mon Sep 2 | No Class |
| Wed Sep 4 | The Research Problem |
| Fri Sep 6 | The Research Problem |
| **4** | Mon Sep 9 | Review of the Literature |
| Wed Sep 11 | Review of the Literature |
| Fri Sep 13 | Review of the Literature |
| **5** | Mon Sep 16 | Searching, Referencing, and IP |
| Wed Sep 18 | Searching, Referencing, and IP |
| Fri Sep 20 | Annotated Reference List |
| **6** | Mon Sep 23 | Writing in the Health Professions |
| Wed Sep 25 | Writing in the Health Professions |
| Fri Sep 27 | Writing in the Health Professions |
| **7** | Mon Sep 30 | Peer-reviewing |
| Wed Oct 2 | Peer-reviewing |
| Fri Oct 4 | No Class, Do Clinical Investigations Module |
| **8** | Mon Oct 7 | Methodology |
| Wed Oct 9 | Methodology |
| Fri Oct 11 | No Class, Fall Break |
| **9** | Mon Oct 14 | Data Analysis |
| Wed Oct 16 | Data Analysis |
| Fri Oct 18 | Data Analysis |
| **10** | Mon Oct 21 | Data Analysis |
| Wed Oct 23 | Results Section |
| Fri Oct 25 | Results Section |
| **11** | Mon Oct 28 | Discussion |
| Wed Oct 30 | Interpreting the Literature |
| Fri Nov 1 | Designing your study |
| **12** | Mon Nov 4 | Designing your study |
| Wed Nov 6 | Designing your study |
| Fri Nov 8 | Designing your study |
| **13** | Mon Nov 11 | Designing your study |
| Wed Nov 13 | Designing your study |
| Fri Nov 15 | Peer-reviewing |
| **14** | Mon Nov 18 | Presentation Preparation |
| Wed Nov 20 | Presentation Preparation |
| Fri Nov 22 | Presentation Preparation |
| **15** | Nov 25-29 | Thanksgiving Break |
| **16** | Mon Dec 2 | In-class Presentations |
| Wed Dec 4 | In-class Presentations |
| Fri Dec 6 | In-class Presentations |