Dept. of Kinesiology and Health Science  
KINE 5355-01 Orientation and Analysis of Laboratory Techniques  
Spring 2024

Instructor: Eric Jones Ph. D.  
Office: EDAN 103  
Office Phone: 468-1864  
Other Contact Information: Lab # 468-1493  
Prerequisites: n/a

Course Time & Location: 4:00-6:30 M (EDAN 112/114)  
Office Hours: (MW 8:30-11:00)  
Credits: 3  
Email: jonesej@sfasu.edu

I. Course Description:
This course examines the theoretical and practical understanding of physiological instrumentation and measurement, including practical laboratory experiences, as preparation for graduate research or other research opportunities. Course fees for laboratory equipment consist of $30.00/semester. KINE 5355 “Orientation and Analysis of Laboratory Techniques” (3 credits) meets one time each week in 150-minute segments for 15 weeks, and also meets for a 2-hour final examination. Students have significant weekly reading assignments that consist of performing thorough literature reviews in 3 different areas within our discipline. Data collection within these topical areas is also performed and disseminated through the writing of 3 research papers that are structured as scientific journal publications. These activities average at a minimum 6 hours of work each week to adequately prepare outside of classroom hours.

II. Intended Learning Outcomes/Goals/Objectives (Program/Student Learning Outcomes):
This course links with SFA Initiative #4: Develop a learner-centered environment.
This course links with SFA’s COE Goal and Initiative #2: Prepare educators and industry professionals.

This course links with SFA Initiative #5: Create new learning opportunities through additional interdisciplinary, international, service learning, and civic engagement experiences.
This course links with SFA’s COE Goal and Initiative #2: Prepare educators and industry professionals.

Program Learning Outcomes:
• The student will be able to demonstrate the ability to read and make critical analysis of original research.
• The student will demonstrate advanced knowledge of anatomical, physiological, psychological and developmental aspects of physical activity as it relates to human well-being and issues of exercise and sport performance.
• The student will be able to demonstrate an understanding of a variety of research methods employed in the subdisciplines in Kinesiology.
• The student will demonstrate the ability to apply their Kinesiology-related knowledge and skills to think critically and ethically in examining issues and solving problems associated with their chosen subdiscipline.

Student Learning Outcomes:
• Students will be able to utilize laboratory equipment and understand how it works (PLO 1,3,4)
• Students will be able to work with human subjects and collect quality data (PLO 2,3,4)
• Students will be able to demonstrate the ability to write scientifically and prepare a paper in journal format for submission to a peer-reviewed journal (PLO 1,3,4)
• Students will be able to analyze research articles, synthesize and formulate ideas (PLO 1,3,4)

Professional Preparation Standards:
  o Standard 1 – The student demonstrates knowledge and abilities in exercise physiology and related exercise science.
  o Standard 2 – The student demonstrates knowledge and abilities associated with physiological risk factors.
  o Standard 3 – The student demonstrates knowledge and abilities in fitness and clinical exercise testing.
  o Standard 4 – The student demonstrates knowledge and abilities associated with exercise prescription and programming.
III. Course Assignments and Exams:
Course grades will be determined through evaluation of 3 assignments that will be submitted throughout the semester. Extra credit opportunities are NOT typically offered.

Articles 1,2,3: These assignments will comprise the bulk of the course grade. In each case research groups will collect data in attempt to answer a well-defined research question (SLO 1,2). This will involve construction of a data sheet; consent form for participants, collection of data (involves competence with equipment), and preparation of a manuscript formatted as to departmental journal guidelines (SLO 3,4) (i.e. in journal format). HPL journal guidelines will be available and SHOULD BE FOLLOWED EXACTLY. All three articles will be formatted according to these guidelines. All components must be submitted (title page, abstract, key words, introduction, methods, results, discussion, practical applications, references, tables, figure captions, figures). – again just as if the articles were to be submitted to a professional journal.

Evaluation of these 3 assignments;
Were journal guidelines followed?
What was the quality of the write-up?
– content, dissemination/explanation of results
– data presentation, tables/figures
– relevant references

Anticipate the evaluation of the 3 articles to get progressively more stringent. As you do more of these, the expectation is that you are improving.

Because evaluation of articles is largely subjective, the following descriptions should be considered when determining your success/status in the course.

“A”: exceptional paper, could be published (except for low n), well written, well presented, analysis correct, grammatically sound, followed guidelines exactly

“B”: less than exceptional but still of high quality, better than average, but still in need of revision prior to submission, one or more components/sections not entirely ready to submit, data analysis adequate but not water tight, minimal grammatical issues

“C”: average paper, all components are included but not convincingly written, data analysis not concrete, presentation of results may need clarification, discussion unfocused or not written scientifically (i.e. sounds like a reader’s digest article – NOT the idea), grammatical errors

“D”: less than average paper, one or more components missing or weakly written, lack of focus in constructing the paper, guidelines not followed well, overall paper difficult to follow, analysis questionable, quality of data questionable, numerous grammatical errors

Plus (+) and minus (-) may also be added to each letter grade on a subjective basis.

LATE SUBMISSIONS WILL AUTOMATICALLY BE REDUCED BY 2 LETTER GRADES, THEN EVALUATED.

3 Ring Binder Assignment: I suggest keeping an electronic folder for this course or purchasing a 2-3 inch binder. ALL relevant work for this course will be placed in sequential order. Items should include, but are not limited to a) the lab manual, b) all 3 articles c) syllabus, d) data sheets, consent forms, data analysis printouts, notes, e) journal guidelines, f) critique/suggestions for the course, g) photocopies of articles used when reviewing the literature on the research projects, h) any handouts or other items related to the course you wish to include (i.e. your own personal list of potential research ideas, notes on equipment calibration/usage, etc). The reason for constructing this binder is so that you will have it as a reference when you conduct future research projects such as your thesis or projects in your first professional position. If done correctly, the electronic folder/binder will be an extremely valuable tool.

Make Up Assignments/Exams – Due to the makeup of this course and the time consuming nature of data collection, assimilation, and dissemination, make up assignments will not be given.

IV. Evaluation and Assessment
Grading/Evaluation Procedures

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<thead>
<tr>
<th>Article I</th>
<th>35%</th>
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<tr>
<td>Article II</td>
<td>45%</td>
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<tr>
<td>Article I Revision</td>
<td>10%</td>
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<tr>
<td>Digital Binder</td>
<td>10%</td>
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V. Tentative Course Outline/Calendar:

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<th>Monday</th>
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<tr>
<td>Jan 22 Introduction, Syllabi</td>
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<tr>
<td>Jan. 29 Ethics, objectivity, bias,</td>
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<td>Feb. 05 Research Process</td>
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<td>Feb. 12 Data Collection</td>
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<tr>
<td>Feb. 19 Data Collection</td>
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<tr>
<td>Feb. 26 Data Analysis/presentation</td>
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<td>Feb. 27 <strong>Article 1 Due</strong></td>
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<td>Mar. 4 Dealing with IRB</td>
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<td>Mar. 11 Spring Break</td>
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<tr>
<td>Mar, 18 Data collection</td>
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<td>Mar. 25 Data Collection</td>
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<td>April 1 Data Collection</td>
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<tr>
<td>April 8 <strong>Article 2 Due</strong></td>
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<td>April 17 Revisions</td>
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<tr>
<td>April 24 <strong>Article 1 Revision Due</strong></td>
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<td>Final Exam: May 6th 4:00</td>
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<td>Final Digital 3 ring binder due</td>
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*Schedule is an approximation and could change*

VI. Readings

No specific text will be utilized for this course. A lab manual and other documentation will be made available through D2L.

VII. Course Evaluations:

“Near the conclusion of each semester, students in the College of Education electronically evaluate courses taken within the COE. Evaluation data is used for a variety of important purposes including: 1. Course and program improvement, planning, and accreditation; 2. Instruction evaluation purposes; and 3. Making decisions on faculty tenure, promotion, pay, and retention. As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the COE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!

In the College of Education, the course evaluation process has been simplified and is completed electronically through MySFA. **Although the instructor will be able to view the names of students who complete the survey, all ratings and comments are confidential and anonymous, and will not be available to the instructor until after final grades are posted.**

VIII. Student Ethics and Policy

**Institutional Absences (HOP 04-110)**

An Institutional Absence may be granted to a student who participates as a representative of the University in academic (including research), extra- or cocurricular, or athletic activities. Students will be excused for institutional purposes from otherwise required academic activity only when a valid Institutional Absence is
approved by the appropriate administrative unit or official and the documentation of approval is provided to the faculty member at least five (5) days in advance.

Institutional absences will not be approved for keystone events, defined as: a special or unique assignment, test, project, experience, or other academic exercise identified by the Faculty member as critical for successful completion of standards of the class and unable to be missed. These events must be identified on the syllabus at the beginning of the semester and communicated to the students. Events added to the syllabus at a later date will not qualify for Keystone Event status. Keystone Events where the date/time is changed will no longer be considered a Keystone Event. Students should make themselves aware of any Keystone Events identified in the syllabus to ensure there are no conflicts.

For keystone events where the assignment dates vary, it is incumbent upon the students to work with their faculty member to not select a conflicting date.

Regular, punctual attendance, documented participation, and, if indicated in the syllabus, submission of completed assignments are expected at all classes, laboratories, and other activities for which the student is registered. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor shall maintain an accurate record of each student’s attendance and participation as well as note this information in required reports (including the first 12 day attendance report) and in determining final grades. Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

Attendance and participation are required at all times. **2 absences will be given to each student for the entire semester, use them wisely!** University travel and Legal obligations will be the only excused absences allowed (written documentation required). Each absence beyond 2 will result in a loss of **one letter grade.** Arriving late to class and early departure is unacceptable. 3 such occurrences will result in an absence and the attendance grade will be reduced accordingly. Any student(s) maintaining no less than a “B” average and perfect attendance may waive the final exam if so desired. **No exceptions will be made for any of the above policies.**

More information on Institutional Absences, including how to apply, can be found at [https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences](https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences).

**Code of Student Conduct and Academic Integrity**

The Code of Student Conduct and Academic Integrity (HOP 04-106) outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.
Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially. For additional information, go to https://www.sfasu.edu/docs/hops/04-106.pdf.

**Withheld Grades Semester Grades Policy (HOP policy 02-206)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to https://www.sfasu.edu/docs/hops/02-206.pdf.

**Students with Disabilities**

To obtain disability-related accommodations, alternate formats, and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services promptly may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

**Student Wellness and Well-Being**

SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

**Other important course-related policies:**

***Other SFA policy information is found in the Handbook of Operating Procedures (HOP)***

**IX: Resources**

The Dean of Students Office (Rusk Building, 3rd floor lobby)

www.sfasu.edu/deanofstudents

936.468.7249
The Health and Wellness Hub
“The Hub”
Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

www.sfasu.edu/thehub
936.468.4008
thehub@sfasu.edu

Crisis Resources:
- Burke 24-hour crisis line 1(800) 392-8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline 1(800) 273-TALK (8255)
- Crisis Text Line: Text HELLO to 741-741

XI: Other Relevant Course Information: