KINESIOLOGY AND HEALTH SCIENCE DEPARTMENT
KIN 4317.001 Physiology of Exercise
Summer II 2023

Instructor: Professor Malcolm T. Whitehead, PhD
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Other Contact: (936) 468-3503

Course Time/Location: M, T, W, Th 1:00-3:05pm, HPE 203
Office Hours: M, T, W, Th 12:30-1:00pm
Credits: 3 hours
Email: whiteheam@sfasu.edu

I. Course Description:

KINE 4317. Analysis of Movement The study of anatomical and mechanical factors that influence human movement. Prerequisites: Must have earned at least a “D” in the following - BIOL 2301 (Human Anatomy and Physiology I) or BIOL 3440 (Animal (including Human) Physiology); PHYS 1305 (General Physics I), PHYS 1105 (General Physics I Laboratory).

KINE 4317. Analysis of Movement (3 credits) meets for 400 minutes each week for 6 weeks and students are expected to attend class meetings and engage in lectures and class learning activities. Practical application-based problem sets for each unit are assigned to be completed outside of class meeting time. A portion of the time allotted for class meetings will be utilized to cover each practical based problem set in detail using a small group student led open forum discussion approach. The course requires students to complete three written exams that necessitates students to demonstrate understanding and utilization of the concepts presented during lecture and the practical problem assignments. Each student is required to complete an analysis of motion project that is a capstone style comprehensive experience for the course that requires the synthesis of information provided in the course and incorporates the practical application of this information. These activities should require 4-6 hours of time per week in addition to the time commitment designated for lecture.

James I. Perkins College of Education Diversity Statement is found at the following link: [http://coe.sfasu.edu/about-us/](http://coe.sfasu.edu/about-us/)

II. Intended Learning Outcomes/Goals/Objectives:

This course is one of the core courses that make-up the scientific foundations area for kinesiology and all movement related fields. It prepares an individual to be able to evaluate and analyze human movement with the intent of influencing improvement. Studying the anatomical and mechanical factors that influence human movement gives an individual the background knowledge to be able to accomplish this goal. This course has been designed to help students in movement related fields to achieve professional excellence and to help the Kinesiology and Health Science Department and the College of Education at SFASU to provide an exemplary program which is recognized at the state, national, and international levels. This is in alignment with the Vision of the College of Education as stated in the COE Conceptual Framework, which can be viewed at [http://www.sfasu.edu/education/about/accreditations/ncate/conceptual/](http://www.sfasu.edu/education/about/accreditations/ncate/conceptual/).

Exercise Science Program Learning Outcomes
1. The student will identify and analyze critical components of physical movements.
2. The student will demonstrate an understanding of basic principles of physical fitness concepts and the utilization of available technology in assessing fitness levels, performance, and physiological effects during various levels of physical stress.
3. The student will design and implement physical education learning experiences that are developmentally appropriate, safe, and that utilize principles of effective instruction.
4. The student will demonstrate an understanding of the physiological principles of exercise
5. The student will be prepared to pass nationally accredited certifications.

Physical Education Teacher Education Program Learning Outcomes
1. The student will identify and analyze critical components of physical movements.
2. The student will demonstrate an understanding of basic principles of physical fitness concepts and the utilization of available technology in assessing fitness levels, performance, and physiological effects during various levels of physical stress.
3. The student will apply knowledge of principles and stages of motor development.
4. The student will demonstrate knowledge of kinesiological principles and content.
5. The student will design and implement physical education learning experiences that are developmentally appropriate, safe, and that utilize principles of effective instruction.

Course Learning Outcomes:
1. The student will be able to accurately describe a movement.
2. The student will be able to identify the anatomical and mechanical factors that most influence a performance.
3. The student will be able to evaluate and analyze a performance using technology with the intent of influencing improvement.

The following NASPE Standards are covered in this course:

**Standard 1: Scientific and Theoretical Knowledge.** Physical education teacher candidates (TC) know and apply discipline-specific scientific and theoretical concepts critical to the development of physically educated individuals.

1.1 Describe and apply physiological and biomechanics concepts related to skillful movement, physical activity and fitness.

1.5 Analyze and correct critical elements of motor skills and performance concepts.

**Standard 3: Planning and Implementation.** Physical education teacher candidates (TC) plan and implement developmentally appropriate learning experiences aligned with local, state and national standards to address the diverse needs of all students.

3.7 Demonstrate knowledge of current technology by planning and implementing learning experiences that require students to use technology appropriately to meet lesson objectives.

**Standard 5: Impact on Student Learning.** Physical education teacher candidates (TC) use assessments and reflection to foster student learning and inform decisions about instruction.

5.1 Select or create appropriate assessments that will measure student achievement of the goals and objectives.
5.2 Use appropriate assessments to evaluate student learning before, during and after instruction.

**III. Course Assignments, Activities, Instructional Strategies, use of Technology:**

1. Instructional Strategies: Lectures, assignments, and in class activities/discussions.
2. Communication: All students should have access to Brightspace/D2L and a SFASU student email address. Assignments, lecture notes and other pertinent information will be available on Brightspace. Student email addresses will be used to communicate with the class and individual students on an as needed basis.
3. Exams: There will be three exams administered during the semester. Each exam will consist of Multiple-Choice, True or False, and Short Answer type questions.
4. Project: Each student will create and present a project.
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5. Participation: Points will be awarded for active engagement in learning activities that occur during class meetings.
6. Bonus: The opportunity to earn a maximum of 10 bonus points may be made available during the course.

<table>
<thead>
<tr>
<th>Assessment/Assignment</th>
<th>Program Standards NASPE</th>
<th>CAEP Standards</th>
<th>ISTE Standards</th>
<th>InTASC Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exam 1: Reference Positions, Anatomical Terminology, Planes and Axes of Motion, Joint Movements, Analysis of Human Joint Movement Patterns, Muscle (Structure, Nomenclature, Fiber Arrangements, Properties, and Roles), Factors Affecting Human Motion</strong></td>
<td>1.1</td>
<td>1.3</td>
<td></td>
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<tr>
<td><strong>Exam 2: Shoulder Girdle, Shoulder Joint, Elbow and Forearm, Wrist and Hand (Structures and Joint Motions)</strong></td>
<td>1.1</td>
<td>1.3</td>
<td></td>
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<tr>
<td><strong>Exam 3: Spinal Column and Pelvis, Hip and Thigh, Knee, Lower Leg, Ankle, and Foot (Structures and Joint Motions)</strong></td>
<td>1.1</td>
<td>1.3</td>
<td></td>
<td></td>
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<tr>
<td><strong>Qualitative Analysis of Movement Project:</strong> Detailed project to analyze physical movements.</td>
<td>1.1, 1.5, 3.7, 4.2, 4.3</td>
<td>1.3,1.5</td>
<td>1a, 1b, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d</td>
<td>1a, 1c, 3g, 3m, 4l</td>
</tr>
</tbody>
</table>

**IV. Evaluation and Assessments (Grading):** Grades for the course will be based on the following:

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Points</th>
<th>Grading Scale</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>40</td>
<td>&gt; 90</td>
<td>A</td>
</tr>
<tr>
<td>Exam 2</td>
<td>40</td>
<td>80-89.9</td>
<td>B</td>
</tr>
<tr>
<td>Exam 3</td>
<td>40</td>
<td>70-79.9</td>
<td>C</td>
</tr>
<tr>
<td>Project</td>
<td>20</td>
<td>60-69.9</td>
<td>D</td>
</tr>
<tr>
<td>Participation</td>
<td>20</td>
<td>&lt; 60</td>
<td>F</td>
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<tr>
<td>Total</td>
<td>160</td>
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### V. Tentative Course Outline/Calendar

(The following content is expected to be covered on the following dates, but unforeseeable circumstances might necessitate a change in date for the content.)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>07/03</td>
<td>Introduction to Analysis of Motion</td>
</tr>
<tr>
<td></td>
<td>07/04</td>
<td>Class will not meet because of Independence Day holiday</td>
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<td></td>
<td>07/05</td>
<td>Anatomical Structures</td>
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<td></td>
<td>07/06</td>
<td>Joint Movements and complete Module 1 Review Questions</td>
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<tr>
<td>2</td>
<td>07/10</td>
<td>Reference Positions and Planes/Axis of Motion</td>
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<td></td>
<td>07/11</td>
<td>Exam 1</td>
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<td></td>
<td>07/12</td>
<td>Class will not meet Face to Face due to NSCA Conference</td>
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<tr>
<td></td>
<td>07/13</td>
<td>Class will not meet Face to Face due to NSCA Conference</td>
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<tr>
<td>3</td>
<td>07/17</td>
<td>Shoulder Girdle (Structures and Joint Motions) and Module 3 Review Questions</td>
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<td>07/18</td>
<td>Shoulder Joint (Structures and Joint Motions) and Module 4 Review Questions</td>
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<td></td>
<td>07/19</td>
<td>Elbow and Forearm (Structures and Joint Motions) Module 5 Review Questions</td>
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<td></td>
<td>07/20</td>
<td>Hand and Wrist (Structures and Joint Motions) Module 6 Review Questions</td>
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<tr>
<td>4</td>
<td>07/24</td>
<td>Exam 2</td>
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<td></td>
<td>07/25</td>
<td>Spinal Column and Pelvis (Structures and Joint Motions) Module 7 Review Questions</td>
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<td>07/26</td>
<td>Hip Joint and Pelvic Girdle (Structures and Joint Motions) Module 8 Review Questions</td>
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<td>07/27</td>
<td>Knee (Structures and Joint Motions) Module 9 Review Questions</td>
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<tr>
<td>5</td>
<td>07/31</td>
<td>Ankle and Foot Joints Module 10 Review Questions</td>
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<td></td>
<td>08/01</td>
<td>Ankle and Foot (Structures and Joint Motions) Module 9 Review Questions</td>
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<td></td>
<td>08/02</td>
<td>Projects Due and Student Project Presentations</td>
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<tr>
<td></td>
<td>08/03</td>
<td>Student Project Presentations</td>
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<td></td>
<td>08/04</td>
<td>Exam 3</td>
</tr>
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### VI. Readings (Required and Recommended – including texts, websites, articles, etc.):

**Required Resources:**
2. Access to D2L to view class lectures and handouts.

### VII. Course Evaluations:

Near the conclusion of each semester, students in the College of Education electronically evaluate courses (the teaching itself and the content/assignments) 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.
3. Making decisions on faculty (full-time and part-time) annual evaluation processes, tenure, promotion, pay, and retention.

As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the PCOE faculty is committed to excellence in teaching and continued improvement.

In the Perkins 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 summarized data will not be available to the instructor until after final grades are posted.
VIII. Student Ethics and Other Policy Information:

Class Attendance and Excused Absence: Policy 6.7

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.

Academic Accommodation for Students with Disabilities: Policy 6.1 and 6.6

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, 936-468-3004 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 in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/

Student Academic Dishonesty: Policy 4.1

Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Faculty members must promote the components of academic integrity in their instruction, and course syllabi are required to provide information about penalties for cheating and plagiarism, as well as the appeal process.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to:
- using or attempting to use unauthorized materials on any class assignment or exam;
- falsifying or inventing of any information, including citations, on an assignment;
- helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to:
- submitting an assignment as one's own work when it is at least partly the work of another person;
- submitting a work that has been purchased or otherwise obtained from the Internet or another source;
- incorporating the words or ideas of an author into one's paper or presentation without giving the author credit.

Penalties for Academic Dishonesty

Penalties may include, but are not limited to, reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university.

Student Appeals

A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).
Withheld Grades: Policy 5.5

Upon the request from student to the instructor of record and at the discretion of the instructor of record with the approval of the academic unit head, a grade of WH may be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work by the deadline set by the instructor of record, not to exceed one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Military Service Activation (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

If a student has been found guilty of academic dishonesty, a grade of “WP” or “WH” may be changed to “WF” at the discretion of the faculty member. In the case of a grade change to “WF”, the course will not count towards the six course drop limit since the student is incurring an academic penalty.

Student Code of Conduct: Policy 10.4

Disorderly conduct including but not limited to: (a) disruption or Interference of students, faculty, administration, staff, the educational mission, or routine operations of the University. (b) Commercial solicitation on campus or with University resources without prior approval from University officials. (c) Failure to comply with a reasonable and lawful request or directive of University Officials. (d) Facilitation of Student misconduct including but not limited to assisting, conspiring, soliciting, or encouraging others to engage in conduct which violates the Student Code of Conduct. More information on Student Code of Conduct can be found at https://www.sfasu.edu/docs/board-regents/student-code-of-conduct-10.4.pdf

The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program at SFA.

SFASU values students’ mental health and the role it plays in academic and overall student success. 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.

On-campus Resources:
SFASU Counseling Services
www.sfasu.edu/counselingservices
3rd Floor Rusk Building
936-468-2401

SFASU Human Services Counseling Clinic
www.sfasu.edu/humanservices/139.asp
Human Services Room 202
936-468-1041

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