Department of Kinesiology & Health Science
KIN 552-001 Scientific Basis of Sport
Spring 2020

**Instructor:** Dustin Joubert, Ph.D.  
**Office:** EDAN 104  
**Office Phone:** 936-468-1380  
**Other Contact:** 936-468-3503 (main office)  
**Course Time & Location:** T 4-6:30; EDAN 114  
**Office Hours:** MW 11:00-12:00; TR 9:30-11:00  
**Credits:** 3  
**Email:** joubertd@sfasu.edu

I. Course Description:
A review of various disciplines that underlie and constitute the basis of exercise science. Additionally, the application of these areas of study will be applied to and discussed in relation to actual physical education and athletic experiences. Prerequisites: N/A.

The goal of this course will be to link the theory of sports performance to the actual application by bridging the gap between research findings to best practices in the field. In doing so, students will actually instruct and perform these skills in addition to presenting the theoretical basis for their practice.

KIN 552 “Scientific Basis of Sport” (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, take regular reading quizzes, write a comprehensive review of literature, and prepare a comprehensive in class presentation and guided activity. These activities average at a minimum 6 hours of work each week to adequately prepare outside of classroom hours.

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

II. Intended Learning Outcomes/Goals/Objectives (Program/Student Learning Outcomes):
This course links with COE goal #1: Provide programs/course based on sound clinical practice/research.
This course links with COE goal #2: Prepare leaders and industry professionals.
This course links with COE goal #4: Provide a variety of teaching venues incorporating the latest technologies to a range of diverse student interests, backgrounds, and aspirations.
This course links with COE goal #8: Conduct research to advance knowledge and to contribute to the common good.

Program Learning Outcomes:
1. The student will be able to demonstrate the ability to read and make critical analysis of original research.
2. 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.
3. The student will be able to demonstrate an understanding of a variety of research methods employed in the subdisciplines in Kinesiology.
4. 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:
Upon successful completion of this course the student will be able to:
1. Develop a knowledge and understanding of sports performance (PLO#1,4)
2. Locate and evaluate relevant, current peer-reviewed research in sport performance (PLO#1-3)
3. Explore research questions, interventions and methodologies in sport performance (PLO#1,3-4)
4. Present findings and application of sport performance concepts and interventions (PLO#1-4)

III. Course Assignments, Activities, Instructional Strategies, use of Technology:
Students will select from a list of instructor approved sports performance topics. Students may choose a topic from outside the pre-approved list with prior permission from the instructor. Students will be responsible for putting together a thorough literature review on the topic, presenting an oral presentation on an instructor approved research paper from their topic, and organizing an activity that the class will participate in to demonstrate the application of the covered topic.

There will also be periodic quizzes over assigned readings. There will be one exam during the semester over content covered by instructor. Final exam will require students to relay findings from a research study to a lay audience in a presentable format.
IV. Evaluation and Assessments (Grading):

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Points</th>
<th>Grading Criteria</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>50 points</td>
<td>A ≥ 90%</td>
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<tr>
<td>Review of Literature</td>
<td>100 points</td>
<td>B = 80-89%</td>
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<tr>
<td>Presentation</td>
<td>100 points</td>
<td>C = 70-79%</td>
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<tr>
<td>Activity</td>
<td>100 points</td>
<td>D = 60-69%</td>
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<tr>
<td>Exam I</td>
<td>100 points</td>
<td>F ≤ 59%</td>
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<tr>
<td>Infographic</td>
<td>50 points</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>500 points</strong></td>
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Sports Performance Topics

1. Neuromuscular Adaptations
2. Muscle Protein Synthesis
3. Endocrine Responses to Exercise
4. Lactic Acid Controversy/Lactate Threshold
5. Performance Determinants: Endurance Exercise
6. Performance Determinants: Power/Speed Athlete
7. Immune System and Exercise
8. Principles of Training
9. Warm-Up
10. Flexibility/Mobility/Stability
11. Recovery
12. Performance Testing: Power/Speed Athlete
13. Performance Testing: Endurance Athlete
14. Resistance Training
15. Speed/Agility Training
16. Power Training
17. Endurance Training
18. Anaerobic Conditioning
19. Concurrent Training
20. Periodization
21. Peaking
22. Hydration
23. Heat
24. Cold
25. Altitude
26. Overtraining
27. Sudden Death
28. Other (with instructor approval)
V. Tentative Course Outline/Calendar: (subject to change, all changes will be announced in class)

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<thead>
<tr>
<th>WK</th>
<th>TUE</th>
<th>TOPIC</th>
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<tbody>
<tr>
<td>1</td>
<td>1/21</td>
<td>Course Introduction</td>
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<tr>
<td></td>
<td></td>
<td>Sport Science: Bridging the Gap from Theory to Practice</td>
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<tr>
<td>2</td>
<td>1/28</td>
<td>Endurance: Assigned Readings/Article Review/Lecture</td>
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<tr>
<td>3</td>
<td>2/4</td>
<td>Endurance: Assigned Readings/Article Review/Lecture</td>
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<tr>
<td>4</td>
<td>2/11</td>
<td>Endurance: Assigned Readings/Article Review/Lecture</td>
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<tr>
<td>5</td>
<td>2/18</td>
<td>Endurance: Assigned Readings/Article Review/Lecture</td>
</tr>
<tr>
<td>6</td>
<td>2/25</td>
<td>Anaerobic: Assigned Readings/Article Review/Lecture</td>
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<tr>
<td>7</td>
<td>3/3</td>
<td>Anaerobic: Assigned Readings/Article Review/Lecture</td>
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<tr>
<td>8</td>
<td>3/10</td>
<td>SPRING BREAK</td>
</tr>
<tr>
<td>9</td>
<td>3/17</td>
<td>Exam 1/Literature Review Due</td>
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<tr>
<td>10</td>
<td>3/24</td>
<td>Presentations</td>
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<tr>
<td>11</td>
<td>3/31</td>
<td>Presentations</td>
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<tr>
<td>12</td>
<td>4/7</td>
<td>Presentations</td>
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<tr>
<td>13</td>
<td>4/14</td>
<td>Presentations</td>
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<td>14</td>
<td>4/21</td>
<td>Presentations</td>
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<tr>
<td>15</td>
<td>4/28</td>
<td>Presentations</td>
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<tr>
<td>16</td>
<td>5/5</td>
<td>Infographic Due</td>
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VI. Readings (Required and recommended—including texts, websites, articles, etc.):

1. Readings, including peer-reviewed research, will be assigned during the semester.

VII. Course Evaluations:

Near the conclusion of each semester, students in the Perkins College of Education electronically evaluate courses taken within the PCOE. 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 PCOE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!

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

**Attendance and Participation:**
Attendance and class participation are required to do well in this class. **Attendance is required for all presentations, even if you are not presenting. Five (5) points will be deducted from your total points for each presentation class period missed without documentation of an excused absence** (see below; Policy 6.7).

**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 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.

**Academic Accommodation for Students with Disabilities (Policies 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, 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.

**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; and/or;
- 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 Internet or another source; and/or,
- Incorporating the words or ideas of an author into one’s paper or presentation without giving 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)**
At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work 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, except as allowed through policy [i.e., Active Military Service (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.

**Student Code of Conduct (Policy 10.4)**
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or
disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. 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 iCare: Early Alert Program at SFA. Information regarding the iCare program is found at https://www.sfasu.edu/judicial/earlyalert.asp or call office at 936-468-2703.

Additional Information:

To complete Certification/Licensing Requirements in Texas related to public education and other professional settings, you will be required to:

1. Undergo criminal background checks for field or clinical experiences on public school campuses; the public school campuses are responsible for the criminal background check; YOU are responsible for completing the information form requesting the criminal background check. If you have a history of criminal activity, you may not be allowed to complete field or clinical experiences on public school campuses. At that point, you may want to reconsider your major while at SFASU.
2. Provide one of the following primary ID documents: passport, drivers license, state or providence ID cards, a national ID card, or military ID card to take the TExES exams (additional information available at www.texas.ets.org/registrationBulletin/ <http://www.texas.ets.org/registrationBulletin/>). YOU must provide legal documentation to be allowed to take these mandated examinations that are related to certification/licensing requirements in Texas. If you do not have legal documentation, you may want to reconsider your major while at SFASU.
3. Successfully complete state mandated a fingerprint background check. If you have a history of criminal activity, you may want to reconsider your major while at SFASU.

For further information, contact Katie Snyder 936-468-1740 or snyderke1@sfasu.edu.

IX. Other Relevant Course Information:

Make-Up Policy: Make-up assignments/activities/exams/labs will NOT be given. Consideration will be made with proof of anomalous circumstances. Late assignments will earn a zero. Revisions/corrections will not be allowed after the assignment is due. Prior arrangements must be made in critical cases. Plan appropriately and communicate responsibly on these issues.

Extra Credit: No extra credit opportunities will be provided, unless otherwise noted. Be proactive with your grades, participation, and effort.

Cell Phones: Please do not use your cell phone during class. If you need to take a call or respond to a text, please step out of the classroom.