

KINE 202: Introduction to Kinesiology

California State University San Marcos

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CRN: 21129

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Office Hours: Tuesdays 1:15–2:15
and by appointment

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3 Credit Hours

“Information is not knowledge” - Albert Einstein

COURSE DESCRIPTION

To aid in the prospective majors in their career choices, to introduce students into fields closely related to exercise and nutritional sciences, to introduce students to current issues in exercise sciences, and to introduce students to key events and concepts in the evolution of exercise science as a discipline and as a profession. Enrollment restricted to Pre- Kinesiology and Kinesiology majors.

CONTENT LEARNING OUTCOMES

There are two primary content learning objectives for KINE 202: (A) knowledge and understanding of the vocabulary and concepts necessary for evidence-based reasoning; (B) knowledge and understanding of the evidentiary and conceptual basis for the major fields within Kinesiology. Specifically, completing KINE 202 involves being able to:

1. Explain taxonomies for critical thinking and reasoning
2. Identify and explain the differences among assumptions, anecdotes, facts, and conclusions
3. Understand and define the vocabulary necessary to evaluate concepts and evidence in Kinesiology
4. Understand and explain factors that may affect personal decision-making in the context of career choices
5. Analyze the assumptions, evidence, concepts, and methods that underlie and differentiate the major fields of Kinesiology
6. Explain the relationship between physical activity participation and health, wellness, and quality of life

SKILL LEARNING OUTCOMES

Another objective of KINE 202 is to become more skilled in critical thinking and reasoning. Completing KINE 202 involves being able to:

1. Effectively read, understand, analyze, and evaluate scientific literature
2. Construct frameworks (conceptual structures that organize and connect ideas and/or facts) to help analyze ideas
3. Construct arguments to defend evidence-based conclusions
4. Synthesize and evaluate plausible strategies for career and/or personal advancement
5. Evaluate the plausibility and effectiveness of different approaches for maintaining or improving health
6. Report scientific findings using clear, well-organized outlines and oral presentation

We will use scientific presentation as a tool to illustrate how frameworks can be useful to simplify problem solving.

KINESIOLOGY PROGRAM STUDENT LEARNING OUTCOMES

KINE 202 is designed to contribute to all of the Kinesiology Department student learning outcomes (KSLOs):

1. Describe fundamental principles of Kinesiology, including anatomy and physiology, teaching movement related skills, physiological response to exercise, and the mechanics and control of movement.
2. Apply Kinesiology related skills to real-world problems through empirical research, internships, field experience, and/or service learning.
3. Evaluate movement science questions through 1) the performance of health, fitness, and movement assessment, 2) the acquisition, analysis, and interpretation of original data, and 3) the appraisal and application of information from current research literature.
4. Utilize oral and written communication that meets appropriate professional and scientific standards in Kinesiology.
5. Model behavior consistent with that of a Kinesiology professional, including 1) advocacy for a healthy, active lifestyle, 2) adherence to professional ethics, 3) service to others, 4) shared responsibility and successful collaboration with peers, and 5) pursuit of learning beyond CSUSM.

LECTURES AND QUIZZES

The primary content for this course will be available through reading (primary literature), and in-class discussions. Online lectures and textbooks will be used as resources to find information necessary for in-class activities and discussions, or provide opportunities for review. The texts (below) are listed for reference only (you will not be responsible for information in a textbook that is not covered elsewhere in class). Each section of the course will address one or more of the questions, as listed in the schedule below.

REFERENCE TEXTS (optional)

Introduction to Kinesiology By Shirl Hoffman, Duane Knudson (Human Kinetics, 2018. ISBN-13: 9781492549925).
Foundations of Kinesiology By Oglesby et al. (Jones and Bartlett, 2018, ISBN-13: 9781284034851)
Foundations of Kinesiology By Murray et al. (Cengage, 2018, ISBN-13: 978-1337392709)

WEBSITE

Assignments, handouts, online lectures and notes, quizzes, instructor correspondence, grades, etc. will be available through the course website. If you need help with web access or computer use or have any unique needs, please contact the instructor.

EMAIL

I always make an effort to respond to emails as promptly and thoroughly as possible. To facilitate this it is important for me to be able to easily identify class emails. Consequently, I request that any emails that you send me about the course begin with "KINE202:" in the subject line. For example, a subject could read "KINE202: Appointment Request." I cannot guarantee responses to emails that do not have "KINE202:" in the subject. In the case that I am slow to respond to an email, please feel free to simply re-send the message. My inbox gets out of control sometimes, and emails can get lost or mis-filed, and I appreciate the reminder if I have somehow misplaced a message or failed to respond for any other reason.

SCHEDULES

The schedules and assignments contained in this syllabus may be subject to change. It is up to you to make sure that you are aware of all announcements concerning changes in the course outline, readings, assignments, exams, and other matters made during class periods whether or not you are in attendance when announcements are made. Some assignments for each class are listed below. Preparing before class is likely to lead to more interesting class time and also facilitate studying.

ATTENDANCE

Regular attendance is essential. Many missed assignments, including quizzes or activities, CANNOT be made up, except in the case of university business or religious holiday. Accepting late assignments is not fair to other students for several reasons. For example, late assignments interfere with our ability to discuss assignments during class periods.

CLASSROOM COURTESY

Please follow these guidelines for common courtesies:

- Respect individual diversity of each person in the class.
- Turn Cell Phones off before class, do not text message.
- Do not listen to a device during class time, including keeping the ear piece in your ear.
- Use computers in class only for class activity. Attempts to multitask (i.e. texting, etc.) will decrease performance

ACCOMODATIONS FOR DISABILITIES

We will make any reasonable accommodations for limitations due to any disability including learning disabilities. Please arrange an appointment to see me to discuss any needs you might have. All discussions are confidential. Students with disabilities who require academic accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disabled Student Services (DSS). This office is located in Craven Hall 4300 and can be contacted by phone at (760) 750-4905, TDD (760) 750-4909 or by email at: dss@csusm.edu. Students authorized by DSS to receive accommodations should meet with me during my office hours, or in another private setting, in order to ensure your confidentiality. **Note:** Please inform me during the first week of classes about any disability or special needs that you have that may require specific arrangements related to attending the class sessions, carrying out class assignments, or writing papers or examinations.

COLLABORATIVE WORK

You will work in small groups to complete lab assignments, discuss assignments, and compile written and oral presentations (e.g. KSLO 5). However, some assignments will be submitted individually. Collaborative work is an opportunity to learn from each other, divide labor on assignments, learn through teaching, meet others in the class and major, become accustomed to team-based work, etc. Therefore, collaborative work is an important part of the class and your grade will reflect your contribution to the success of your groups. Evidence of leadership, effort, organization, congeniality and flexibility will favorably reflect on your performance in the class. However, collaborative work is not meant to include sending emails to the entire class with answers to quizzes or tests, which is considered a violation of the honesty and integrity policies.

WRITING

The University has an "All-University Writing Requirement" that students write at least 2,500 words for a 3 or more unit course. The University requirement reflects the importance of writing for virtually every field of study. Therefore, we will emphasize writing (specifically scientific/technical writing), and assessments for most work will be presentations involving writing. Writing is an expression of the critical/analytical/hierarchical thinking that is a major objective of KINE 202.

FORMATTING IS NOT WRITING. You may have been told (repeatedly) that effective writing involves use APA or MLA style to format your references. In my opinion, the emphasis on APA reference formatting comes at great cost to actually learning how to write. I don't care in the slightest how your references are formatted, so long as the formatting is clear and complete (including complete references that I can cross-check). Margins, spacing, reference styles, etc. are matters of appearance and are NOT important.

What IS important is that you write using specific, concise, and clearly-written sentences. MOST important is that you structure your paragraphs and papers using REASONING (deductive and/or inductive): that you lead the reader to specific, clear conclusions using specific, clear evidence. Use APA reference formatting if you want – I don't care. So long as your papers are well-reasoned, I'm good.

ASSIGNMENTS

Assignments will assess comprehension of the important concepts presented in the course, and the ability to apply concepts to novel problems. The assignments dates are scheduled ahead of time for your convenience, therefore plan accordingly. A missed assignment can potentially be excused with a **VALID AND WRITTEN EXCUSE FROM A REPUTABLE SOURCE**. Otherwise, no points can be given for the assignment. Cheating will result in a failing grade for the course and possible referral to the university for disciplinary action.

TIME EXPECTATIONS

Completing a college courses is traditionally expected to involve 2-3 hours per week per credit hour of effort outside the course. Therefore, a reasonable expectation of this course would be that it will entail about 6-9 hours of effort outside of class time during the normal semester (multiply all these values by 2-3 times in summer, where time is compressed but content is unchanged). The effort required each week may vary, but on average the time might be expected to break down as shown in the table to the right.

ACTIVITY	TIME INVESTED
Reviewing lectures/reading	3-4 hours
Completing short assignments/quizzes	1 hour
Case Studies/Projects	3-4 hours

Organization is half the battle. In my experience, there is a high correlation between organization and success. Be sure not to fall behind on assignments. Having a weekly schedule, and adding class time into your schedule for each course (as you might for your work and other activities) can greatly improve performance and reduce stress. Completing an assignment early takes as much time as completing it at the last minute, but usually results in higher grades (particularly if you get feedback). I encourage you to work with friends and groups to discuss course material and complete assignments.

CLASS PERIODS

Most class periods will consist of class discussions, group work, and class presentations. If there are other things that you read about, hear about, know about, etc. that are relevant to the course, please do bring these up and discuss them! Class discussions are always welcome so long as they are focused and include everyone.

OFFICE HOURS

I encourage you to make use of office hours, or make appointments to come talk to me if you have questions or concerns. I have observed dramatic improvements in grades through one-on-one interaction. I also appreciate any and all feedback about the structure of the course, the material, ideas for making things better or clearer, etc. Feedback provided will not factor into grading decisions.

My office is in UH 310. If you arrive for an appointment and my door is closed, please knock. I keep the door open for all meetings with students, without exception.

EXPECTATIONS OF THE INSTRUCTOR

What is the instructor's job? To transfer information from their brain to the students'? To sort and rank students through grades? I would argue that these are not possible or desirable, respectively. Ideally, instructors have several responsibilities:

- 1) Instructors identify information and concepts about their course topics that are most important for understanding. Based on their knowledge and experience, instructors select from the vast amounts of information available the most relevant topics for study and reflection.
- 2) Instructors design activities that guide students through the process of discovery and learning, providing encouragement and constructive criticism, identifying important questions and encouraging students to become actively engaged in their own inquiry.
- 3) Instructors provide examples of the thinking process of their disciplines. Instructors demonstrate the creative process that leads to new ideas (e.g. testable models), and show examples of the evaluation and judgment that are used to come to conclusions.
- 4) Instructors assess the students in the course (i.e. grading). Instructors must determine the level of understanding required, design assessments for students to demonstrate understanding, and clearly communicate the instructor's expectations to students.
- 5) Instructors are responsible for maintaining academic standards and integrity. Instructors are responsible for ensuring that college-level coursework in each class is appropriate for the field, the class level, contributes to Department and University learning objectives, and is capable of having a long-term impact on students. Personally, I consider it an ethical imperative not to sell students short based on assumptions or potential misperceptions. I assume that ALL students are capable of HIGH QUALITY work on par with students anywhere. It is the instructor's job to try to find ways to achieve high performance for each individual, and help to motivate the students to put in the time and effort necessary for excellence.

Finally, instructors have an added responsibility. Instructors have a responsibility not to spell everything out for the students. Although guidance, clarity, and communication may seem conducive to **knowledge** learning, excessive guidance can actually be detrimental for **skill** learning and higher-order understanding. Improving writing, or analysis, or evaluation skills requires attempting to perform assignments without complete guidance – in the presence of perceived uncertainty both in the desired outcome and the best path to reach the outcome. Skill learning depends on making mistakes: having expectations that are not completely structured and allow for errors, trial and correction, and, yes, even the potential for frustration sometimes.

SOME SUGGESTIONS FOR SUCCESS

There is a lot that can be gained from KINE 202 (in my own humble opinion ;-). Getting the most out of the course is easiest if you are organized, not overly stressed out, and have enough time to reflect on some of the topics that we cover. Some suggestions:

- 1) Keep up-to-date on assignments and even get ahead a little. Just like setting your clocks faster by a few minutes can sometimes help getting places on time... if you set personal deadlines ahead of class deadlines, things will seem much easier.
- 2) Keep a record of areas that are confusing and ask questions. Come to office hours.
- 3) Try to understand, not simply memorize, course material. Understanding means putting information in frameworks of other things that are already known, and thinking about connections among different course topics. Compare and contrast different topics from the course, etc.
- 4) Please Please Please don't be satisfied with poor performance! If a score does not reflect the effort made to learn the material, then come to office hours, consult peers, take action to improve! I am confident that everyone is capable of getting a top grade. Don't sell yourself short and settle for less!
- 5) Please give me feedback about aspects of the course that you are not satisfied with. I can't change everything this semester, but some things I can!

CLASSROOM HONESTY AND INTEGRITY

Honesty and integrity are a reflection of your character. Therefore, cheating is considered a serious offense. Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/material that are derived from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty, in accordance with the general rules and regulations of the university.

Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole. Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University.

Students are expected to conduct themselves in a manner appropriate for class and comply with the rules of student conduct. The rules of student conduct are included in the California Code of Regulations, Title 5, and beginning at Section 41301. A student who violates university policies or regulations is subject to disciplinary action, which can result in a warning, reprimand, probation, suspension, or expulsion. The Chancellor of the California State University specifies procedures under which the university may take disciplinary action against a student. These procedures are on file in the Office of the Dean of Students, Craven Hall, Room 5306.

GRADING.

I don't particularly like grading – but it has to be done. Ideally, grades are valid assessments of learning. Unfortunately, grades often assess only some aspects of learning and can be influenced by lots of other confounding factors ☹. My honest suggestion is to focus on really understanding the material well and don't worry about the grade – it will take care of itself (for the best). Also, it is usually best to keep focused on what YOU have control over. You have control over how you organize your time and how much time you allow for this course, how focused and dedicated you are when studying, how effectively you use your group time, the effort you put into connecting new information to things you already know, etc. You have control over your strategy for getting correct answers on each individual assignment. However, you DO NOT have control over your final grade. Final grades are the worry of one person – the instructor (and believe me I worry about grades and try to make sure that they are fair and reflect learning).

In general, thinking about your grade is not really a good use of time apart from using your current score to change the way you approach the class. Whether half way through the term you have the grade you want or not, I would argue that in either case, what you DO should be the same: try to learn the material the most effectively you can using the time that you have. Therefore, I would advise against spending time thinking about the grade (which you do NOT have control over) and focusing on learning (which you DO have control over).

Grades will be assigned according to points earned during the course. The course is NOT curved (it is criterion-referenced, not norm-referenced). If everyone gets an "A," then I'll be ecstatic.

GRADING	Points	Percent of final grade
Class Attendance	150	30%
Class Participation/Leadership	50	10%
Quizzes	50	10%
Exam	50	10%
Presentations (3)	150	30%
Career Presentation	50	10%
Total	500	100%

CLASS SCHEDULE

Subject to change at any time

Classes are TR 2:30-3:45 PM, Academic Hall 408

DATE/SECTION	TOPICS	QUESTIONS	REFERENCE READING / ASSIGNMENTS
SECTION 1: CRITICAL REASONING AND CAREERS			
23 JANUARY <i>Course Introduction</i>	-Logistics -Expectations and Potential	Who is this person? What is this class all about?	- Read this syllabus carefully
25 JANUARY		NO CLASS	
30 JANUARY	-Learning objectives of college classes	1. What three principles contribute to effective learning? 2. How can "frameworks" help us analyze problems?	- Required reading: NRC Report
01 FEBRUARY	- Scientific Literature	3. How are scientific papers structured and why? 4. What is the process of peer review and why is it so important? 5. How do we find scientific literature? 6. How do we read figures?	- Required Reading: Brand and Huiskes (2001)
06 FEBRUARY	-Cognitive Biases	7. What are some cognitive biases that affect our decision-making?	- Required reading: Tversky and Kahneman (1974)
08 FEBRUARY	-Critical Reasoning	8. What are the differences among assumptions, anecdotes, facts, and conclusions? 9. How can assumptions affect performance?	- Required reading: Steele and Aronson (1995)
13 FEBRUARY	-Career/life objectives	10. What are your goals and priorities? 11. What factors have affected your goals and priorities?	- Required reading: CSUSM Career Guide
15 FEBRUARY	-Critical Reasoning	12. What are inductive and deductive reasoning? 13. How do we reasonably come to conclusions?	- Required reading: Popper (1980)
20 FEBRUARY	-Assessment	14. What are validity and reliability? 15. What are quantitative vs. qualitative measures? 16. What are norm-referenced vs. criterion-referenced measures?	- Required reading: Kimberlin and Winterstein (2008)
22 FEBRUARY	-Evidence-based evaluation	17. What are different kinds of evidence? 18. Are all types of evidence equally strong? 19. What are Hill's criteria and how are they useful?	- Required reading: Ebell et al., 2004
27 FEBRUARY	-Exam review and introduction to areas of Kinesiology	20. How can we evaluate different fields of Kinesiology?	
01 MARCH		EXAM: CRITICAL REASONING, ASSESSMENT, EVIDENCE	
SECTION 2: AREAS OF KINESIOLOGY: PHYSICAL			
06 MARCH	-Physical	21. What are the conceptual and evidence bases of the fields: Physical Therapy vs. Occupational Therapy vs. Orthopedics vs. Chiropractic vs. Athletic Training?	
08 MARCH	-Research	22. How can we collect evidence?	
13 MARCH	-Presentations	23. How to give effective oral presentations?	
15 MARCH	-Research	24. How evidence-based are different areas of Kinesiology focused on physical systems? 25. What careers are possible?	

29 MARCH, 03 APRIL		Class Presentations	
SECTION 2: AREAS OF KINESIOLOGY: PHYSIOLOGICAL			
27 MARCH	-Physiological	26. What are the conceptual and evidence bases of the fields: Exercise Physiology vs. Cardiology vs. Nutritional Supplements vs. Applied Kinesiology	
05-12 APRIL	-Research	27. How evidence-based are different areas of Kinesiology focused on biochemistry/physiological systems? 28. What careers are possible?	
17,19 APRIL		Class Presentations	
SECTION 3: AREAS OF KINESIOLOGY: WORKPLACE and PUBLIC HEALTH			
24 APRIL – 03 MAY	-Health and Workplace	29. What are the conceptual and evidence bases of the fields: Ergonomics vs. Wellness coaching vs. Internal Medicine vs. Public Health vs. Physical Education? 30. What careers are possible?	
08,10 MAY		Class Presentations	
14 MAY 6:15-8:00 PM	FINAL CAREER PRESENTATIONS		

GRADING KEY

<i>POINTS</i>	<i>PERCENTAGE</i>	<i>LETTER GRADE</i>
500-465	100%-93.0%	A
464-450	92.9%-90.0%	A-
449-440	89.9%-88.0%	B+
439-415	87.9%-83.0%	B
414-400	82.9%-80.0%	B-
399-390	79.9%-78.0%	C+
389-365	77.9%-73.0%	C
364-350	72.9%-70.0%	C-
349-340	69.9%-68.0%	D+
339-300	67.9%-60.0%	D
299-000	59.9%-0.00%	E

“Those who can make you believe absurdities, can make you commit atrocities.”

-- Voltaire