KINE 4362 online syllabus

Course Syllabus

SPRING 2018

KINE 4362 – BIOMECHANICAL ANALYSIS (3 semester hrs. credit)

College of Health Sciences | Department of Kinesiology

Course instructor: Dr. Jennifer J. Didier

Email: Jennifer.Didier@shsu.edu **Best Option**

Office: 211 Health and Kinesiology Center Phone: 936-294-1183

*I also hold a second role on campus which means I have 2 offices and 2 phone numbers

Assistant Dean for the College of Health Sciences: Office: LDB Suite 201F 1 Phone: 936-294-2319

Office Hours: Tuesday and Wednesday 9:00-10:00 by appointment (email so I know which office I will be in so you know where to go), as well as, other hours by appointment

Sport and Human Performance Center for Research and Testing (SHPCRT): 248 & 249 HKC, Biomechanics Lab: HKC 147

Textbook: McGinnis, P M. Biomechanics of Sport and Exercise, 3rd Ed. Champaign, IL: Human-Kinetics.

Class time: 100% Online, Check your SHSU email and Blackboard often.

General description of the course: This course is designed for students who are preparing for a variety of professions in which the teaching, training, or rehabilitation of motor skills is involved. The goal of this course is to provide a theory-based foundation of biomechanics for implementing appropriate strategies and techniques for instructional, training, and rehabilitation applications. At the end of this course, you should be able to apply biomechanical principles to motor skill performance, help reduce injury risks, and understand the effects of proper versus improper kinematics and kinetics.

Course Content:

- Introduction to Biomechanics
- Forces
- Linear Kinematics
- Linear Kinetics
- Work, Power, Energy
- Torques and Moments of Force
- Mechanics of Biological Materials
- The Skeletal System
- The Muscular System
- The Nervous System (if time allows)
- Qualitative Biomechanical Analysis to improve Technique
- Qualitative Biomechanical Analysis to improve Training

Course Objectives: This course is designed to help the student:

- Define kinesiology, biomechanics, kinematics, kinetics, & related terms.
- Describe Newton's Laws of Motion and how they apply to exercise and sport.
- Identify types of motion experienced by the human body and describe factors that cause and modify motion.
- Describe the concepts of work, power, and energy.
- Detail the factors that impact technique improvement in human movement.
- Compare and contrast qualitative and quantitative techniques for analyzing human movement.
- Demonstrate how muscle functions to affect human movement.
- Describe how improper technique limits the ability of the human body to produce effective movement.
- Apply the biomechanical principles essential to improve performance and reduce injury.
- Explain the importance of research in analyzing human movement.

Dr. Jennifer J. Didier Page 1 of 7

KINE 4362 online syllabus

IDEA Objectives: In this course, our focus will be on these major objectives (as assessed by the IDEA course evaluation system):

- 5 **Gaining a basic understanding of the subject** (e.g. factual knowledge, principles, methods, or **theories**)
- 5 Learning to *apply* course material (to improve thinking, problem solving, and decisions
- 5 **Developing specific skills**, competencies, and points of view needed by professionals in the field most closely related to this course.
- 5 Learning how to **find, evaluate, and use resources** to explore a topic in depth.
- 5 Learning to appropriate methods for collecting, *analyzing*, and interpreting numerical information.

Course material on BLACKBOARD: The course syllabus, schedule, lecture videos, assignments, quizzes, announcements, grades for exams, semester grade, etc... can be accessed via Blackboard for KINE 4362 on your Blackboard account. To access materials in Blackboard from your home computer, you need Adobe Acrobat, Microsoft Word & Excel, or a program that can translate Word documents. Materials will be posted in Blackboard as Adobe Acrobat or Word document attachments. Also, some information may be in the form of a spreadsheet for calculations so you will need a spreadsheet program, such as Excel. You are also required to have a webcam. If you do not have these programs on your computer, you can use a computer at one of the several computer labs on campus or your local library.

SHSU Email Policy: SHSU policy dictates that **all email** correspondence between faculty and students be done using the SHSU email system. As a result, the instructor will not communicate via email with you using addresses other than the SHSU system (e.g., yahoo, gmail, hotmail, etc.). You will need to check your SHSU email regularly. This is the best form of communication for the Department, the University, and myself.

You are responsible to drop the class in the event that you stop attending class.

Course Requirements:

- 1. Kinesiology majors and minors are required to achieve a C or better in this class (degree plans for academic year 2017-2018 and forward).
- 2. Technology This is an online course and technology is NOT an excuse for late work. Come up with a creative solution even if it is temporary until the problem is solved.
- 3. <u>Attendance.</u> You are required to log in to SHSU Online <u>a minimum of twice a week</u>, each week of the semester.
- 4. <u>Professionalism/Participation</u>. It is expected that students be active, enthusiastic, and collegial participants during the semester. On your Discussion board assignments you will need to post YOUR answer/response and then respond to 2 other responses unless otherwise noted.

5. Exam Information

Exams will be administered only on the specified dates. You will have a 2 day window to begin your exam <u>using ProctorFree</u>, but each exam will have a 45-60 minute time limit. If you, for any reason, miss an exam you will be required to take a <u>comprehensive</u> make up exam at the end of the semester. This exam will be comprehensive including all material covered throughout the semester. **NO EXCEPTIONS**. If you miss the makeup, you will receive a zero for the missed exam and will most likely have to retake the course. **You must have a D average on your exams to PASS the class**.

- You will also need a WEBCAM for this course when you take exams and for your final assignment. The
 Webcam will need to be connected to your computer or laptop. Exams are to be taken using
 ProctorFree and no outside help (closed book = no notes, no book, no websites and no other outside
 help).
- If you use additional resources, including but not limited to, websites, cell phones, electronic devices, books, notes, etc... while taking your exam I will propose you receive a 0 for the exam grade.

Dr. Jennifer J. Didier Page 2 of 7

KINE 4362 online syllabus

- If you do not use ProctorFree I will propose you receive a 0 for your exam grade and you will have to take the comprehensive exam.
- If you **do not record an exam with** ProctorFree you will have to take the COMPREHENSIVE makeup exam during the last week of classes.
- <u>Cell phones are not to be used at any time during your exam</u>. Be sure to have an actual calculator for any calculations on the exam.
- If there are any violations recorded during the comprehensive makeup exam I will propose you are given a 0 on the comprehensive exam.
- There is a delay between when I grade your exam and when I complete the review of your exam videos so your grade may be proposed to change to a 0 at a later time in the semester if you have violated any of the above points, even if you previously had a higher score recorded.
- You will be contacted if a violation occurs and will have the right to due process which will include submitting documentation to the Dean of Students regarding the incident(s).

Exams will identify IDEA Objectives:

- 5 **Gaining a basic understanding of the subject** (e.g. factual knowledge, principles, methods, or **theories**)
- 5 Learning to apply course material (to improve thinking, problem solving, and decisions
- 5 **Developing specific skills**, competencies, and points of view needed by professionals in the field most closely related to this course.
- 6. <u>Professionalism:</u> Professionalism or integrity is an integral part of being a scholar and establishing a quality learning community. **Learning is your goal** (not just a grade). The underlying instructional model in this class is a personal and social responsibility model. Not only should your focus your efforts on personally taking advantage of learning experiences, but you are responsible to enrich others learning experience as well. Your social goal is to be respectful and courteous to others and act as a learning resource. Being a "resource" means that it is your goal to help others understand content, and likewise, they will do the same. This is the foundation of establishing a learning community. Use of cell phones, "social media" or doing other things inhibits your ability to be "present" or engaged in the learning of the content.
- 7. <u>Assignments</u>. Assignments will occur during the semester. These sessions will be done on your own. The purpose of the assignments are to provide an opportunity for you to: (a) actively experience biomechanical situations related to concepts discussed in the lectures and book, and (b) apply biomechanical principles to professional contexts in which you may eventually be employed.
 - i) Assignments: Each assignment will to be turned into the dropbox on the date specified at the time of the lab. Lab report forms will be on SHSUonline. Assignments and Lab reports must be typed, unless you are told otherwise. All assignments are considered late if they are turned in after the due date, 10% OF YOUR GRADE WILL BE TAKEN OFF for EACH DAY the report is LATE. If the assignment is turned in more than 5 days late, you will receive a 0 for that lab or assignment.
 - ii) Show your work on the math type problems and always <u>add your units</u> to each number you write down.
 - iii) Assignment grading policies: Unless specified otherwise, each assignment should be an <u>individual report</u>.. Each assignment will be graded out of 20 100 total points. If a questions is worth 15 points it requires a more detailed and complete answer than one worth only 5 points. You must EXPLAIN, DESCRIBE, COMPARE/CONTRAST completely to receive full credit on an answer. NOTE: If two or more assignments are identical, or suspiciously similar, each will

Dr. Jennifer J. Didier Page 3 of 7

Biomechanical Analysis Online KINE 4362 online syllabus receive a 0 for the assignment. All written assignments will be scanned by "safe assign" or "turnitin.com" **

- 8. <u>Quizzes</u>: Quizzes are due by the due date listed on the calendar. You will have 10 minutes for each 10 point chapter quiz. You cannot take the quiz after the due date. You can then review your incorrect answers for 5 days after the due date. Do not wait until the night before the exam to start reviewing your quizzes because you will not have access to all the quizzes. Stay on top of your studying by studying every day.
- 9. <u>Discussion Board:</u> You must post your response by the given due date and respond with a well thought out response to at least two other students. You must use your biomechanics terms to discuss the topic. Do not just say "good job, "I didn't think of that", etc... Relate your response to what you read in the book or learned from lecture.

 <u>Assignments will work on the following IDEA Objectives:</u>
 - 5 **Gaining a basic understanding of the subject** (e.g. factual knowledge, principles, methods, or **theories**)
 - 5 Learning to apply course material (to improve thinking, problem solving, and decisions
 - 5 **Developing specific skills**, competencies, and points of view needed by professionals in the field most closely related to this course.
- 10. <u>Class Materials:</u> The textbook is a requirement of the course. <u>You are responsible for reading the chapters from the textbook</u> and handouts distributed in class or uploaded to SHSUonline. The course syllabus, class notes, lab reports, announcements, and e-mail, can be accessed via the SHSUonline for KINE 4362 on your SHSUonline account. To access materials in SHSUonline from your home computer, you need Adobe Acrobat Reader, Microsoft Word & Excel.
- 11. <u>Virtual office:</u> If you have a general course question please post this to virtual office. This will allow all students to benefit from your question and answer. You may answer your classmates and you can subscribe to this discussion board so you know when your peers have posted a question. If you question is more personal, please email me.
- 12. <u>Email Etiquette</u>. When communicating with me via email you **must** follow the etiquette below; otherwise I reserve the right of not replying to your email.
 - All email must be sent from your "@SHSU.edu" email account.
 - Be sure to include a meaningful subject line; this helps clarify what your message is about and may also help me prioritize reading your email.
 - Just like a written letter, be sure to open your email with a greeting like Dear Dr. Didier:
 - Use standard spelling, punctuation, and capitalization. THERE'S NOTHING WORSE THAN AN EMAIL SCREAMING A MESSAGE IN ALL CAPS. Stay away from abbreviations and do not use emoticons (those little smiley faces).
 - Write clear, short paragraphs and be direct and to the point; I consider your email communication as business.
 - Be friendly and cordial, but do not try to joke around (jokes and witty remarks may be inappropriate and, more commonly, may not come off appropriately in email)
- 13. <u>Drop/add/withdraw</u>. It is your responsibility to make sure that you are officially enrolled in this course. If, at any point, you decide to stop attending this course, it is your responsibility to officially drop or withdraw from enrollment. Failure to do so may result in a failing grade.
- 14. <u>Syllabus subject to change</u>. While information and assurances are provided in this course syllabus, it should be understood that content may change in keeping with new research and literature and that events beyond the control of the instructor could occur. Students will be informed of any substantive occurrences that will produce syllabus changes.

Dr. Jennifer J. Didier Page 4 of 7

16. Additional Exam information:

Students enrolled in this course are expected to complete 5-6 proctored exam(s).

Exam proctoring services at Sam Houston State University are provided by SHSU Online, free of charge to SHSU distance education students, via ProctorFree [®].

If a proctoring service, beside ProctorFree, is utilized (such as ProctorU®), it will be the student's responsibility to schedule and pay for such service.

17. Extra Credit: You have 3 main ways to receive EC.

- (I) You can receive extra credit to help your grade in this course by volunteering to participate in research studies being conducted by professors and/or graduate students approved by Dr. Didier and/or
- (II) you can volunteer to take part in charity events approved by Dr. Didier. You can also
- (III) complete the motor learning written extra credit at any time during the semester for up to 5 points of extra credit.
- a) You will earn 1 point per hour of participation. The points you earn will be added as percentage points to you assignment average at the end of the semester.
- b) The maximum number of extra credit points you can earn for the semester is 10. You cannot receive extra credit in multiple classes for participation in the same project! You must provide paperwork from the experimenter or the supervisor for the charity event, stating that you are only receiving credit for one class.
- c) You must submit your completed paperwork to Dr. Didier to receive credit (a form is located in the extra credit folder on blackboard).
 - i) You must have the supervisor indicate how long you volunteered, on what day, for what event, what activities you were involved in (what you did), and A supervisor signature and include a contact number and email address of the supervisor of the charity event or research project.
 - ii) You will also relate your activity back to what you are learning in class.

 ******You will not get credit if you do not turn in this signed form with all information included.
- d) Charity work involves either time or money (and sometimes both). That is how the world works and all charities survive. People donate their time to help, they donate their money to help purchase services and goods, they donate their time to collect donations from others, or they donate their time to purchase or prepare the services.
- e) Some of the extra credit will relate to course material and some may just be service opportunities for you to learn other life lessons. Most all will relate to promoting Health and Fitness in the community.
- f) Some may be on campus while others will be off campus, some during the week, while other opportunities will be on the weekend. Some will require more work than others.
- g) There are no guarantees on the number or opportunities that will be available.
- h) I will announce these opportunities both via email and as announcements on SHSU online.
- ***Extra credit is EXTRA and NOT mandatory. You cannot 'buy' your grade through extra credit, but you will get credit for doing more than just the coursework. You must have a D exam average to pass, so you cannot do lots of service work to make-up for lack of proper studying and preparation.
- * If you complete all assignments on-time, follow all instructions, and clearly relate the material learned in the course to the questions on your assignments and exams, you will not likely need EC, but if you miss assignments, fail to study as needed, fail to follow instructions, or just make mistakes along the way EC is there to help. It may or may not help you to move from one letter grade to the next.

18. Semester grading

70% = Exams(6 exams including the final exam)You must have a D average on your exams to PASS the class.10% = Quizzes15% = Assignments5% = Discussion Boards (DB)

Dr. Jennifer J. Didier Page 5 of 7

KINE 4362 online syllabus

To calculate your semester grade:

- 1. Calculate the average of your exam % scores.
- 2. Calculate the average of your assignment % scores.
- 3. Multiply your exam avg. by 0.70; multiply your minor assignment average by 0.15; multiply your quiz average by 0.10 and your DB average by 0.05. Then add these results together to calculate your semester % grade
- 4. Use the grading scale below to determine your semester letter grade.

Grading scale: A = (90-100%) B = (80-89.49%) C = (70-79.49%) D = (60-69.49%) F = (0-59.49%)

University Policy and Guidelines ACADEMIC DISHONESTY:

"Self-plagiarism represents a significant problem in academia as it serves to undermine the learning process and outcomes that are a key feature of each course that is offered as a part of a student's curriculum. As a result, the Department of Health and Kinesiology has a strict policy in place to prevent self-plagiarism in the classroom. Self-plagiarism is defined as the submission of any type of assignment that contains content that is recycled from other assignments or a prior publication that one submits for course credit in another course.

Each instructor is provided the discretion to evaluate whether a student has engaged in self-plagiarism on a course assignment. If a student is unsure whether use of prior content would constitute self-plagiarism, they must consult with the instructor of the course within a reasonable period of time prior to the due date of the assignment. In most cases, this consultation should take place a minimum of 10 business days prior to submission. Following submission of the assignment, if the instructor deems that the student has engaged in self-plagiarism, he or she has the right to state that the student has violated Section 5.3 of The Texas State University Rules and Regulations dealing with Academic Honesty and the student is thereafter subject to any and all penalties and punishments present in the policy. This may include failure of the assignment and/or failure of the course. Additionally, the student may be referred to the Department Chair of Health and Kinesiology, the Dean of the College of Health Sciences, the Dean of Students, and/or the Provost and Vice-President for Academic Affairs for further academic review."

When you submit your homework online, through the dropbox on SHSU Online, it will be scanned by "safe assign" or "Turnitin.com" and will check for plagiarism. If it is similar to other work from this class, previous semesters, or work on the internet, it will flag the information and let me know. If you turn in work that is not your own, you will received a 0 on the assignment and further action may be taken. If more than one assignment is similar to another, BOTH students will receive 0's for the assignment. No assignment will be accepted if it was not turned into the dropbox in proper format.

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work policy, see: Dean of Student's Office

Academic Policies

- a. Class attendance policy (see <u>SHSU Class Attendance policy AP 800401</u>) each faculty member is obligated to clarify her/his classroom policy regarding absences in writing to each student enrolled in class.
- b. <u>Procedures in cases of Academic Dishonesty AP 810213</u> (be sure to include statement regarding plagiarism)
- c. Academic Grievance Procedures for Students AP 900823
- d. Students with Disabilities AP 811006
- e. Student Absences on Religious Holy Days AP 861001
- f. Use of Telephones and Text Messengers in Academic Classrooms and Facilities AP 100728

OR FOLLOW THE LINK TO THE ADDITIONAL INFORMATION http://www.shsu.edu/syllabus/

Dr. Jennifer J. Didier Page 6 of 7

Summary of Policies:

- Always relate the information back to biomechanical concepts and terms when answering ALL assignments.
- Always show your work and add units to all numbers. The more work you show the more likely I can give partial credit and understand where you are misunderstanding.
- You must have a D average on Exams to pass the class.
- Exams must be taken using Proctor Free and no outside help (closed book = no notes, no book, no websites, no phones, no electronics, and no other outside help).
- If you do not use Proctor Free I will propose you receive a 0 for the exam and you will have to take the comprehensive makeup exam.
- Practice using Proctor Free with the practice quiz to make sure everything works correctly.
- Your exam average is worth 70% of your grade.
- There are opportunities for Extra Credit.
- Any assignment turned in late will lose 10% of the grade for each day it is late. After 5 days the assignment cannot be turned in.
- If you, for any reason, miss an exam, or receive a 0 on an exam, you will be required to take a **comprehensive (all chapters)** make up exam at the end of the semester.
 - This exam will be comprehensive including all material covered throughout the semester. NO EXCEPTIONS. If you miss the makeup, you will receive a zero for the missed exam and will most likely have to retake the course. You must have a D average on your exams to PASS the class.
- This class will help you to make progress on:
 - 5 **Gaining a basic understanding of the subject** (e.g. factual knowledge, principles, methods, or **theories**)
 - 5 Learning to apply course material (to improve thinking, problem solving, and decisions
 - 5 **Developing specific skills**, competencies, and points of view needed by professionals in the field most closely related to this course.
 - 5 Learning how to **find, evaluate, and use resources** to explore a topic in depth.
 - 5 Learning to appropriate methods for collecting, *analyzing*, and interpreting numerical information.

This is a difficult course; however, you CAN be successful if you put forth the effort and learn how this information will be used in your professional career.

Dr. Jennifer J. Didier Page 7 of 7