

KIN 415: Theory of Corrective Exercise

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Prerequisites: EXW 330 or KIN 334

Course Objectives:

At the conclusion of this course students should be able to:

- (1) Understand common injury mechanisms for major muscle groups and joints
- (2) Identify basic assessment protocols for determining relative muscle strength / control
- (3) Identify basic corrective exercises for common muscle weaknesses / postural impairments
- (4) Communicate functional anatomy principles and their relation to Objectives 1-3

Course Format:

The course follows the following structure for each unit. Individuals work in groups of 3-4 of their choosing and analyze a case study across all 5 units for an athletic movement of their choice using it to investigate common injury mechanisms and potential problems. This exploration involves various analyses of the movement, problem, and solution in conjunction with reports and presentations to demonstrate their findings.

Functional Review / Movement Analysis

- identify phases, goals, actions, and muscle roles for movement

Unit Lecture

- instructor explains mechanisms of common pathologies

Pathology Analysis

- justify and explain each relevant pathology for movement

Exercise Analysis

- explain and compare exercises for each pathology

Unit Analysis

- create roadmap of pathologies and exercises

Unit Paper / Presentation

- present cohesive report of analysis for the unit

Course Details

Readings

There is no textbook required for this course.

Group Requirements

All presentations and assignments will all be conducted in groups of 3-4 individuals. You will be in the same group the entire semester. Each group will pick an athletic movement case study to investigate throughout the course for each Unit and the Final Paper / Presentation. Group members found to not be contributing significantly will be deducted 50% of possible points. Group members found to be consistently absent or not contributing will work on their own.

Analyses

On a regular basis we will be engaged in a variety of in-class activities called analyses that are designed to facilitate active learning. These analyses will be graded for completion and not accuracy. If you are absent on the day of an analysis or more than 15 minutes late to class, you will not receive credit.

Unit Papers

A Unit Paper will be due online after each unit. There is no required format or structure for these papers. The goal is to compare and contrast the exercises learned by describing how / why the exercise is performed, explaining / rationalizing the muscles involved, describing the possible injury mechanisms leading to the necessity of each exercise for different populations, and thoroughly explain the strengths and weaknesses. These papers should conclude with each group's respective case study by which you investigate common injuries / deficiencies and discuss the methods by which one could evaluate the injury and how corrective exercises could be used / implemented. Including supplemental material (with citations) to the lectures is encouraged. Papers will be graded depending on thoroughness, effectiveness, and formatting.

Each group will perform a 30 minute presentation for their designated unit once in the semester rather than submitting a Unit Paper. The goal of this presentation is to be the Unit Paper in presentation form. Unit Presentations will be graded using the same rubric as the Unit Papers.

Final Paper

There is no final exam for this class. Instead each group will submit a Final Paper consisting of a breakdown of their case study with all relevant pathologies / corrective exercises along with descriptions / rationales across all 5 units.

General Policies

Attendance

Attendance is mandatory for the entire class period on days in which a presentation is scheduled, regardless of whether the student is presenting or not. Missed presentations may not be made up except in the case of university business, religious holiday, or physician-documented illness. Unexcused absences will result in a grade deduction of up to 100% of the possible points.

Grading

Questions regarding report or exam grades must be handled before the next submission of that nature is due. If the submission in question is the last of its nature, i.e. at the end of the semester, the student must bring the question to the instructor's attention immediately. Therefore, the question can be handled before final grades are due. In general, I allow for up to one week after a grade has been issued to dispute that grade.

Communication

E-mail is the preferred means of communication. In general, I reply to emails within 24 hours.

Late Assignment Policy

I allow for assignments to be submitted up to 24 hours late for 50% credit.

Academic Integrity

Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The Academic Integrity Policy is strictly enforced for students found in violation. Read more about this policy in the ASU Policies section.

Generative AI Usage Policy

Some assignments in this course may include or allow use of Artificial Intelligence (AI), including ChatGPT or related tools for the creation of text, images, computer code, audio, or other media. The instructor will inform you when, where and how you may use these tools, and provide guidance for attribution. Use of generative AI tools in any other context in this course will be considered a violation of the ASU Academic Integrity Policy, and students may be sanctioned for confirmed, non-allowable use. If at any point you have questions about what is permitted, contact the instructor to discuss before submitting work.

ASU POLICIES

ASU Online Course Policies

View the [ASU Online Course Policies](#).

Add/Drop/Withdraw

Access the [University Registrar website](#) for information on grades, the academic calendar, and add/drop/withdrawal options among other things. NOTE: If you are considering withdrawing, please check with financial aid as it may be impacted by a withdrawal.

University Excused Absences

Accommodation for Religious practices in accordance with [ACD 304-04](#)

The university community should, in all its activities, be sensitive to the religious practices of the various religious faiths represented in its student body and employees. Faculty are asked to recognize the obligations of their students who may be participating in the observance of religious holidays. Students should notify faculty at the beginning of the semester about the need to be absent from class due to religious observances.

Missed class due to University-sanctioned activities in accordance with [ACD 304-02](#)

Students who participate in university-sanctioned activities that require classes to be missed, shall be given opportunities to make up examinations and other graded in-class work. However, absence from class or examinations due to university-sanctioned activities does not relieve students from responsibility for any part of the course work required during the period of the absence.

Academic Integrity and Student Code of Conduct:

ASU expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the [Student Code of Conduct and Student Disciplinary Procedures](#), the [Computer, Internet, and Electronic Communications Policy](#), the [ASU Student Academic Integrity Policy](#), and outlined by the [Office of Student Rights & Responsibilities](#). Anyone in violation of these policies is subject to sanctions.

Academic Integrity

Academic honesty is taken very seriously. While interaction among students is encouraged, students are expected to adhere to the [ASU Student Academic Integrity Policy](#). Plagiarism of any kind will not be tolerated. Students must properly cite sources used for assignments. Students must take exams independently without assistance from others. Students may not submit papers written by persons other than themselves. Students must submit original work for this course and may not submit papers previously submitted to another class. Consequences of non-compliance can be significant, including: failing the assignment or course, receiving a permanent "XE" grade for the course, removal from a major or program of study, expulsion from the university, among others.

The [ASU Student Academic Integrity Policy](#) lists violations in detail. These violations fall into five broad areas that include, but are not limited to:

1. Cheating on an academic evaluation or assignment.
2. Plagiarizing.
3. Academic deceit, such as fabricating data or information.
4. Aiding academic integrity policy violations and inappropriately collaborating.
5. Falsifying academic records.

Information on the Academic Integrity procedure within the College of Health Solutions can be found at <https://catalog.asu.edu/policies/chs>.

Student Code of Conduct

Violations of the ASU Student Code of Conduct, other than the provision concerning academic dishonesty, are more generally considered inappropriate behavior. The [Office of Student Rights and Responsibilities](#) reviews and sanctions these matters. If a student violates both the academic integrity provision and additional provisions of the Student Code of Conduct, both the college and the Office of Student Rights and Responsibilities will review the matter. Each independently makes determinations concerning violations and appropriate sanctions.

Disruptive or Violent Behavior

In the classroom and out, students are required to conduct themselves in a manner that promotes a safe environment that is conducive to learning and conducting other university-related business. All incidents and allegations of violent or threatening conduct by an ASU student will be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. Such incidents will be dealt with in accordance with the policies and procedures described in Section 104-02 of the Student Services Manual, available at <http://www.asu.edu/aad/manuals/ssm/ssm104-02.htm>. Be advised that an instructor may withdraw a student from the course when the student's behavior disrupts the educational process per Instructor Withdrawal of a Student for Disruptive Classroom Behavior (<http://www.asu.edu/aad/manuals/usi/usi201-10.html>).

Student Health

Content Warning:

Students may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These emotional health concerns or stressful events may diminish academic performance and/or reduce the ability to participate in daily activities. [ASU Counseling Services](#) provides counseling and crisis services for students who are experiencing a mental health concern. Any student may call or walk-in to any ASU counseling center for a same day or future appointment to discuss any personal concern. ASU's dedicated crisis line is available 24/7 for crisis consultation by calling 480-921-1006.

[ASU Health Services](#) provides high-quality health care that is accessible, affordable and compassionate to ensure the well-being and success of students. Login to your [My Health Portal](#) or call 480-965-3349 to schedule an appointment or contact a provider.

Campus Network Outage and Technical Support

When access to Canvas is not available for an extended period of time (greater than one entire evening) you can reasonably expect that the due date for assignments will be changed to the next day (assignment still due by 11:59pm).

To monitor the status of campus networks and services, please visit the System Health Portal (<http://syshealth.asu.edu/>).

Technical Support

This course uses Canvas to deliver content. You can access Canvas through your [MyASU](#) portal.

To contact the help desk you have two options:

- For immediate assistance, call ASU at 1-855-278-5080.
- Visit the [ASU Experience Center](#) to get personalized support through 24/7 live chat or submit your request online (<https://my.asu.edu/service>).

For more information on Canvas the following resources are suggested:

- [Canvas Course Tour Video](#)

- [Canvas Student guide](#)
- [Digital Portfolios Help Resources](#)
- [Library Resources for Students](#)
- [Best Practices for Setting Course Notifications](#)
- Canvas Student App - Download through Google Play ([Android](#)) or the App Store ([iOS](#))

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these are required assignments, you need **not** make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identifiable/sensitive information. If you have any concerns about this, please contact your instructor.

Disability Accommodations

Reasonable accommodations are determined on a case-by-case, course-by-course basis to mitigate barriers experienced due to a disability (SSM 701-02). Students with disabilities who require accommodations must register with the [Student Accessibility and Inclusive Learning Services](#) and submit appropriate documentation. It is recommended students complete this process at the beginning of the term and communicate as appropriate with their instructor.

- Email: Student.Accessibility@asu.edu
- Phone: (480) 965-1234
- FAX: (480) 965-0441

Inclusive Excellence and Health Equity

The College of Health Solutions has a mission to improve the mental and physical health of our larger and immediate communities by better understanding the challenges that individuals and populations face, while striving to be part of the solution. The college is committed to the idea that every member of our society should have the opportunity for good health and wellness throughout their lifespans. In an effort to actualize this ideal, we embrace and support inclusive excellence in everything we do, including teaching, research, service, and clinical practice.

Learn more about the College of Health Solutions' commitments to justice, equity, diversity and inclusion at <https://chs.asu.edu/about/justice-equity-diversity-inclusion>.

Prohibition Against Discrimination, Harassment, & Retaliation

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. [ASU Counseling Services](#) is available if you wish to discuss any concerns confidentially and privately. ASU online students may access 360 Life Services, <https://goto.asuonline.asu.edu/success/online-resources.html>.

Copyright

Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement. For more information, see the Computer, Internet, & Electronic Communications Policy at <http://www.asu.edu/aad/manuals/acd/acd125.html>

The course syllabus and all other class materials (slide presentations, handouts, assignments, digital recordings, exams, quizzes, etc.) are intellectual property of Arizona State University and are not to be publicly distributed or otherwise commercialized since these materials are copyright protected. Such materials are for sole use in that designated semester. It cannot be used in any other form unless via a written statement of approval from the instructor. Commercial note taking services are prohibited in accordance with ACD 304-06 available at <http://www.asu.edu/aad/manuals/acd/acd304-06.html>

Information in this syllabus, other than grade and absence policies, is subject to change with reasonable advance notice. Please consult Canvas regularly

Course Grading

Grade Distribution

Analyses:	15%
Peer Evaluations:	5%
Unit Papers:	60%
Final Paper:	20%

Final Grade Scale

Grade	Percentage
A+	97-100
A	93-96.9
A-	90-92.9
B+	87-89.9
B	83-86.9
B-	80-82.9
C+	77-79.9
C	70-76.9
D	60-69.9
E	< 60 (Fail)

KIN 415: Theory of Corrective Exercise – Spring 2024 Class Schedule

Day	Date	Lecture	Assignment Due
T	1/14	Exercise Basics	
Th	1/16	Case Study Selection and Breakdown	Case Study Analysis
T	1/21	No Class	
Unit 1 – Shoulder Girdle and Shoulder Joint			
Th	1/23	Review / Movement Analysis	Movement Analysis 1
T	1/28	Pathology Lecture	Application 1
Th	1/30	Pathology Analysis	Pathology Analysis 1
T	2/4	Exercise Analysis	Exercise Analysis 1
Th	2/6	Unit Analysis	Unit Analysis 1
T	2/11	Unit Paper Presentations	Unit 1 Paper
Unit 2 – Elbow, Radioulnar, and Wrist Joints			
Th	2/13	Review / Movement Analysis	Movement Analysis 2
T	2/18	Pathology Lecture	Application 2
Th	2/20	Pathology Analysis	Pathology Analysis 2
T	2/25	Exercise Analysis	Exercise Analysis 2
Th	2/27	Unit Analysis	Unit Analysis 2
T	3/4	Unit Paper Presentations	Unit 2 Paper
Unit 3 – Spinal Column and Pelvic Girdle			
Th	3/6	Review / Movement Analysis	Movement Analysis 3
Spring Break			
T	3/18	Pathology Lecture	Application 3
Th	3/20	Pathology Analysis	Pathology Analysis 3
T	3/25	Exercise Analysis	Exercise Analysis 3
Th	3/27	Unit Analysis	Unit Analysis 3
T	4/1	Unit Paper Presentations	Unit 3 Paper
Unit 4 – Hip and Knee Joints			
Th	4/3	Review / Movement Analysis	Movement Analysis 4
T	4/8	Pathology Lecture	Application 4
Th	4/10	Pathology Analysis	Pathology Analysis 4
T	4/15	Exercise Analysis	Exercise Analysis 4
Th	4/17	Unit Analysis	Unit Analysis 4
T	4/22	Unit Paper Presentations	Unit 4 Paper
Unit 5 – Ankle Joint and Foot			
T	4/22	Unit Lecture / Movement Analysis	
Th	4/24	Pathology Analysis / Exercise Analysis	
T	4/29	Final Paper Discussion	
Th	5/1	Open Class	
Tuesday May 6th – Final Paper Due (by 11:59pm MST)			