

## KINE 5392

Advanced Functional Assessment and Corrective Exercise  
(3 credit hours)  
SUMMER 2016  
TuTh 8 AM -12:00 PM

<b>Instructors:</b>	Jed Stratton, MHA, ATC, LAT, PES, CES, CKTP	Cindy Trowbridge, PhD, ATC, LAT, CSCS
<b>Office:</b>	College Park Center	PEB 112 D Suite
<b>Office Phone:</b>	(817) 272-9472	(817) 272-3134
<b>E-mail:</b>	stratton@uta.edu	ctrowbridge@uta.edu
<b>Office Hours:</b>	By appointment	By appointment

**Primary Texts:** Cook G et al. *Movement: Functional Movement Systems*. Aptos, CA: On Target Publications; 2010.

Clark M and Lucett S, eds. *NASM Essentials of Corrective Exercise Training*. Baltimore, MD: Lippincott Williams & Wilkins; 2011.

i-HomeExerciseProgram - [www.i-HEP.com](http://www.i-HEP.com) info@i-HEP.com

NATA (2011). *Athletic Training Educational Competencies*, 5<sup>th</sup> ed.

### Course Description

Classroom and laboratory experiences that provide an introduction to functional assessment and corrective exercises. Specific topics will include an analysis of common biomechanics of movement and the evidence-based application of functional assessment and assignment of corrective exercises.

### Course Objectives:

1. Introduce students to the various functional movement assessments.
2. Introduce students to the various functional certifications.
3. Introduce students to the various evidence based resources for functional movement assessments.
4. Introduce students to numerous return to play functional sport testing procedures.
5. Introduce students to valid and reliable injury preventative programs.
6. Introduce students to corrective exercise sequences to supplement functional assessments.

### Student Learning Outcomes

After completing this course, students will be able to:

1. Properly execute various functional movement assessments, including National Academy of Sports medicine screening as well as the Functional Movement Screen and Select Functional Movement Assessment.
2. Explain the principles of movement dysfunctions and application of corrective exercise regimen.
3. Implement corrective procedures based on the most valid evidence based research.
4. Properly execute the various preventative and return to play sport testing procedures.

5. Create and present descriptions of various movement dysfunctions and underlying causes.

### Student Learning Outcomes (cont'd)

6. Perform a complete assessment and corrective exercise assignment to patients dealing with musculoskeletal dysfunctions.

### Active Learning

Your active participation in this class will be required. You will be responsible for your own learning by reviewing class material before and after class. We will guide you in this process; however, in the end the onus of learning will be your responsibility.

Here are your **KEYS** to success:

- **EFFORT** (*Work hard*)
- **APPROACH** (*Work smart*)
- **ATTITUDE** (*Think positively*)

Synthesize the information you are learning and apply it whenever you get the chance. Do not be afraid to ask questions or challenge the current medical or scientific assumptions. In fact, when you study the material, participate in class, ask thoughtful questions, and accept my help you will be able to apply your knowledge to any clinical situation. Your brain will only grow in response to how much it is challenged and used.

Become intrinsically motivated to improve yourself and your understanding of therapeutic modality treatments and techniques; if you do this you will succeed every time.

### Athletic Training Educational Competencies

The following **Knowledge and Skills** will be addressed in this class:

#### Therapeutic Interventions (TI)

TI 7, 10-12, 14, 18

#### Prevention and Health Promotion (PHP)

PHP 28-31, 42-45



<b>Evaluation:</b>	<u>Examination</u>	
	Practical Skill Exam	40%
	<u>Coursework</u>	
	Quizzes/Worksheets	20%
	Literature Reviews/Evidence Based Moments	15%
	End of course Project	25%
		<b>60%</b>
	<u>Professional Development</u>	
	Lecture/Laboratory activity participation AND Notebook	5%
		<b>100%</b>

**Grading Scale:** A = 90%; B = 80%; C = 70%; D = 60%; F = 59% and below

As a policy of the University of Texas at Arlington (UTA) outlined in the official Graduate Catalog, graduate credit will be given for grades of A, B, or C for work done at UTA, subject to the following conditions.

1. The student must maintain a B average in all work done in the major.
2. The student must maintain a B average in all work done in the minor.
3. The student must maintain a B average in all advanced work.

## Classroom Policies

*“Life is what happens, while you are busy making other plans” John Lennon*  
Remember: Communication is the key.

## Cell Phone Policy

No cell phones in class for verbal or text message conversations. Please turn them off or silence them during our class period. If you actively perform or receive cell phone calls or text messaging during class, we will deduct points from your final grade.

## Attendance and Class Preparation

Class attendance is **required**. Excused absences include university approved absences or those that I receive notification of (i.e. illness, doctor appointments, etc.) in a timely manner. Lecture class begins at 10:30 am. Tardiness is **NOT** acceptable. After three late arrivals you will be given one unexcused absence. **Three unexcused absences will automatically drop your grade by one letter (i.e., A to B, B to C, etc.).**

Each student is expected to prepare for class by reading the assigned chapter(s) and handouts **prior** to class. If you miss a class, you are responsible for obtaining all information presented. Remember: *Poor planning on your part is not an emergency on my part.*

## Expectations for Out-of-Class Study

A general rule of thumb is this: for every credit hour earned, a student should spend 3 hours per week working outside of class. Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for quizzes, etc.

## Assignments

Each student is expected to prepare for class by reading the assigned chapter(s) and handouts **prior** to class.

Assignments are **DUE** on the posted or announced date at the beginning of class. If an assignment is turned in late, points will be deducted from the assignment. Missed assignments can **only** be made up if absence was excused. All missed and late assignments **must** be made up within **one** week of original due date unless prior arrangements are made with instructor or you will receive a zero grade.

## Practical Exam

There will be one comprehensive final practical exam for this class. **The one comprehensive practical exam will be offered in class only on designated final exam date.** Practical exam will allow students to perform portions of select movement assessment screens, rehab protocols, manual therapies, return to play assessments based on randomly drawn scenarios and additionally will be multifaceted with recall, application, and analysis questions throughout. Use your lecture notes, textbooks, and assignments to prepare yourself for the exams.

Missed exams can **only** be made up if absence was excused. All missed and late exams **must** be made up within **one** week of original due date unless prior arrangements are made with instructor or you will receive a zero grade.

## Quizzes

Quizzes will be given throughout the semester. These quizzes will be both **announced and unannounced**, so be prepared every lecture period. Quizzes will contain material from previous lectures and discussions. Be prepared for short answer, labeling, and multiple choice questions. Missed quizzes can **only** be made up if absence was excused. Same rules apply for make-ups.

## Worksheets

Worksheets will be given throughout the semester. These will be provided on Blackboard and will cover various aspects of the class and assigned reading.

## Literature Reviews/Evidence Based Moment

Each student will summarize research articles (Background, Purpose, Methods, Results, and Conclusions) and present to the class using **PowerPoint**. Presentations should not be longer than 5-8 minutes. Grades will be assigned based on quality of presentation. Specific examples will be provided for assistance.

## Class Notebook/Binder

At the end of the semester, each student is required to turn in his/her course notebook for a grade. A three-ring notebook is expected to be neat and organized with section tabs and a table of contents **OR** you may submit a small 3-ring notebook with table of contents and returned assignments along with a "thumb drive" that is neatly organized and contains all lecture material. **The notebook should include lecture notes, articles, handouts, quizzes, tests, student presentations, worksheets, and evidence based projects.** When returned, this notebook should be saved and used as a reference point for future study.

**Department of Kinesiology - Drop Policy:** It is the responsibility of the student to add or drop classes or withdraw from school within the appropriate time frame established by the University Registrar. (The departments are not allowed nor obligated to add or drop students from classes.) Deadlines can be found in the current Schedule of Classes.

**Master of Science in Athletic Training Program Grade Requirement:** For both admission and continuance, UT Arlington ATEP students must meet the following academic requirements to remain in good standing in the program:

1. The student must maintain a B average in all work done in the major.
2. **Athletic training courses with an earned grade of C or lower must be repeated**

\* If a student fails to maintain a cumulative GPA of 2.5 or an athletic training GPA of 3.0, the student will be placed on probation. A student will be afforded one semester, at most, to satisfy the GPA requirements. During the first probationary semester, the student will be allowed to continue accruing clinical experience hours; however, he/she will be required to attend mandatory study hall (approximately 4-6 hrs/week). Should the student fail to raise their GPA during the second probationary semester, he/she will be removed from the ATEP.

## UNIVERSITY POLICIES

### **Grade Grievances:**

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate / graduate catalog. For undergraduate courses, see [http://wweb.uta.edu/catalog/content/general/academic\\_regulations.aspx#19](http://wweb.uta.edu/catalog/content/general/academic_regulations.aspx#19); for graduate courses, see [http://grad.pci.uta.edu/about/catalog/current/general/regulations/#grade\\_grievances](http://grad.pci.uta.edu/about/catalog/current/general/regulations/#grade_grievances).

### **Drop Policy:**

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

### **Americans with Disabilities Act:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

### **Academic Integrity:**

Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the

Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

### **Student Support Services:**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

### **Electronic Communication:**

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

### **Student Feedback Survey:**

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located at front or back of classroom. Move to emergency exit door or internal stairway to proceed outside. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

### **Librarian to Contact**

For assistance with your library needs in this course, please consult:

[Peace Ossom Williamson \(peace@uta.edu\)](mailto:peace@uta.edu); **Central Library; 817.272.6208** or [Kaeli Vandertulip \(kaeli.vandertulip@uta.edu\)](mailto:kaeli.vandertulip@uta.edu); **Central Library; 817-272-5352.**

The following web links are provided to help you navigate the library system.

- Find a journal: <http://ns6rl9th2k.search.serialssolutions.com/>
- Interlibrary Loan: <https://uta.illiad.oclc.org/illiad/index.htm>

**KINE 5392  
Summer 2016**

	<u>Date</u>	<u>Instructor</u>	<u>Topic</u>	<u>Reading Material</u>
<b>Week 1</b>	T 7/12		Syllabus, Competencies, Class Procedures Disablement Model/ Patient Rated Outcomes	
			Orientation to Functional Assessment Human Movement Science Anatomy Review NASM Lower Extremity Assessments	Presentation/Review Ch. 1-5 NASM Review Ch. 2 Movement <b>Ch. 6 NASM</b>
	Th 7/14		End of course projects assigned Student Dysfunction Presentations	Handout
<b>Week 2</b>			OHS/SLS Peer Assessments Decipher Peer Assessments Assignment	<b>Ch. 7 NASM</b>
	T 7/19		Assessment tools: HHD MMT	
			Assessing Function: FMS/SFMA EBM Student Presentations (1-4)	Ch. 5 & 89-106, 123-131 Movement Student EBM Presentations <i>Students 1-4</i>
	Th 7/21		SWATA Meeting	Arlington: Attend meeting if possible, \$35
<b>Week 3</b>				
	T 7/26		Inhibit: MFR, PRT, IASTM, Mulligan Lengthen: Stretching variations, MET	<b>Ch. 9 NASM</b> <b>Ch. 12 Movement</b> Ch. 10 NASM Ch. 13 Movement
			Application: Inhibit, Lengthen Activation/Integration Bring together full CEx Continuum	<b>Ch. 11 NASM</b> <b>Ch. 14 Movement</b> Handout
	Th 7/28		Application: Activation/Integration Upper Extremity Movement Screens: THR and NASM Nutrition, Body Comp.	Articles/protocols as assigned
<b>Week 4</b>			Fatigue Assessments  EBM Student Presentations (2)	Articles and handouts as assigned  Student EBM Presentations <i>Students 5-8</i>
	T 8/2		Adjunctive Therapies: K-Taping Core Progression Rolling	Articles/protocols as assigned
			Return to Play Assessments Preventative Jump Programming	Articles/protocols as assigned
	Th 8/4		FMS Corrective progressions  EBM Student Presentations (3)	Handout <b>Posted FMS Correctives</b>  Student EBM Presentations <i>Students 9-12</i>
<b>Week 5</b>				
	T 8/9		Review Day	
			Bring it all together (More Scenarios)	
	Th 8/11		<b>Practical Exam</b>	
<b>Week 6</b>	15		<b>Project Presentations</b> 8am - 12pm	