KIN 250: Measurement in Kinesiology

Spring 2017 Section 001 - Tuesday & Thursday, 10:20-11:40am 203 IM West

Instructor: Amanda McGowan, MSc

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Course Description:

This course focuses on the methods and materials for measurement and evaluation in the various fields within Kinesiology. These fields include, but are not limited to: administration, athletic training, biomechanics, cardiac rehabilitation, exercise physiology, sport psychology, physical therapy, sociology, and teaching. Measurement activities will address motor skills, physical fitness, and knowledge and attitudes associated with physical activity.



Course Objectives:

The student will demonstrate knowledge of:

- 1. Terms, concepts and procedures associated with measurement and evaluation in the areas of kinesiology
- 2. Measurement scales and how to summarize a set of test scores
- 3. How to describe and to use distributions of test scores
- 4. Reliability and validity of norm and criterion-referenced tests
- 5. Ways measurement and evaluation can be used in school and non-school settings
- 6. How to select, to modify, and to construct skills tests
- 7. How to select and to construct knowledge, physical fitness, and affective characteristics tests
- 8. How to evaluate the merit of test scores relative to normative and absolute standards
- 9. Use and misuse of statistics

Course Expectations:

Each student is expected to:

- 1. Arrive on time to course meetings having completed assigned readings
- 2. Participate in all class activities, including but not limited to in-class discussions and base group work
- 3. Complete and submit each assignment/lab when due
- 4. Successfully complete all assignments, labs, and examinations
- 5. Construct professional emails to the instructor (see additional information below)

Students:

- 6. Do not need laptops in class, but are welcome to use personal computers for note taking.
 - a. Facebook does not allow for adequate course note-taking. Nor does any other online retailer, social networking website, or instant messaging platform.
- 7. Are allowed to bring cell phones to class, but listening to music, text messaging, or taking phone calls will not contribute to success in this course. *The instructor reserves the right to ask students to leave the classroom if they are texting during class.*
- 8. Are **not** allowed to use cell phones to take pictures of lectures, exam reviews, or other instructional material.
- 9. Are expected to review the syllabus and D2L page for all information prior to asking the instructor for clarification.
 - a. Students are also expected to ask at least 2 other class members before contacting the instructor. The instructor reserves the right to forward any question along with response received via email to all course members (names will be removed).

COURSE CONTENT

Exam 1									
	I. Introduction	II. Measurement & Evaluation	III. Basic Statistics	IV. Criteria for Test Selection					
A. B. C. D.	Course procedures Assignments Grading plan Reasons for studying measurement and evaluation	A. Learning domains B. Needs assessment C. Five phases of curriculum development	 A. Levels of measurement B. Frequency distributions C. Graphs D. Measures of central tendency E. Measures of variability F. Properties of the normal curve G. Standard Scores H. Correlation I. Linear regression and standard error of estimate J. Tests for differences between groups 	A. Validity, reliability, and objectivity B. Administrative concerns in test selection C. Planning test administration					

Exam 2							
V. Measuring Health-Related Physical	VI. Measuring the Psychomotor	VII. Measuring the Cognitive					
Fitness Domain	Domain	Domain					
A. Assessing health, lifestyle, and physical	A. Hierarchy of skill development	A. Planning the written test					
fitness	B. Skill-related physical fitness	B. Selection of test items					
B. Assessing cardiorespiratory fitness	C. Defining Affect	C. Writing the test					
C. Assessing muscular strength and endurance	D. Measuring Affect	D. Administering the written test					
D. Assessing body composition and	E. Types of Inventories	E. Analyzing test results					
anthropometric components	F. Types of Scales						
E. Assessing flexibility							
F. Assessing stress							
G. Designing programs							
VIII. Special Populations & Intervention							

VIII. Special Populations & Intervention Programs

REQUIRED ITEMS

Textbook:

Morrow, J. R., Mood, D. P., Disch, J. G., & Kang, M. (2016). *Measurement and Evaluation in Human Performance* (5th ed.). Champaign, IL: Human Kinetics.

Additional items:

Please view office hours as a time to clarify points made in class, to talk about measurement and evaluation as it relates to your interest(s), or to discuss any concerns you may have relative to the class.

E-mail may be enough to clarify certain points, but in some circumstances a face-to-face meeting may be more beneficial.

D2L and computer requirements:

In this course we will be using D2L. Within the first week you should make yourself comfortable using this program. Students should also have access to Microsoft Word and Microsoft Excel. We will be using these frequently through the beginning of the course. Additionally, a calculator can be used for quizzes and exams.

Electronic communication:

Email Etiquette

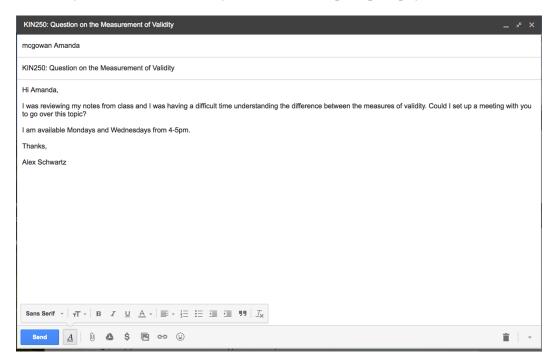
To help you develop your professional communication skills, please follow the instructions below while composing an email.

When contacting me via email students are expected to:

- 1. Use their MSU e-mail address (do not email me through the D2L message utility).
- 2. Include a subject line that delineates the purpose of the email with the course number.
- 3. Identify themselves by full name.
- 4. Begin with a greeting, end with a sign-off, and form complete sentences

To encourage you to compose professional emails, failure to adhere to these guidelines may result in a delayed response or no response at all.

Below is an example of what an e-mail may look like before it is sent. Notice that the **MSU** e-mail address is used, the subject line is specific and contains the **course information**, and the text includes a **greeting** and a **sign-off** with **full name**. This is the best way to ensure that I receive your e-mail and respond promptly.



COURSE CONSTRUCTION

Reading Assignments:

Each student is expected to complete assigned readings prior to class meetings. It will be helpful to bring your text to class for small group work on labs. When outside readings are assigned, these will be posted on the course's D2L site. You should have access to a copy of the outside readings in class.

In-Class Reading Quizzes (CRQ):

In order to assess your comprehension of assigned readings and course material, 5 short quizzes will be given at the start of class. Quiz dates are indicated on the course schedule. Quizzes will be six questions; each question is worth half (.50) a point for a total of 3 points (cumulative = 15 points).

Laboratory Assignments:

Laboratory assignments are designed to give a more detailed experience on selected topics. When partner or small group assignments are given, **EACH** member should still submit their own assignment and list their partner or other group members. In addition, each member should place their name on the sign-in sheet. Each laboratory assignment will be worked on in class. There will be **9** lab assignments for a total of **90** points (10 points each). Labs are due on D2L by the start of class on their respective due dates. Late assignments will be assessed a 2-point daily penalty. If students are found on Facebook or other websites that are not directly related to the current lab, a loss of points will result. Further, if students attempt to forge names of students who did not attend lab, a zero will be awarded for all those in the group involved.

Testing Material:

The quiz and examinations are constructed so that 80% of the questions come from material presented/discussed in class and within the readings. The remaining 20% of questions are written to address higher cognition levels. In this manner, a student can do well in this class if they demonstrate knowledge of the material as presented in lectures, readings and labs. The student who can take this information and demonstrate that they can apply, analyze, synthesize and evaluate the material will do exceptionally well in KIN 250.

Ouiz:*

One quiz will be given during the semester. This quiz will be worth 35 points. The quiz will be limited to questions and problems based upon the subject matter from the lectures, class discussions, laboratory assignments, and associated readings. The quiz will contribute to the final course grade. Your quiz score will not be dropped. Therefore, every effort should be made to avoid missing the quiz at the scheduled time.

Examinations:*

Two examinations worth 50 points each will be given. The student is responsible for material covered in class. Quiz, laboratory assignments, and lecture notes will serve as a good review of the material for each exam.

*The dates for the quiz and exams presented on the course outline/schedule can be moved by the instructor. These dates will not be changed to be earlier than the specified date, but rather pushed back if necessary to cover all material adequately.

Final Examination:

The final examination is worth 60 points. This final exam is cumulative.

GRADING PROCEDURES

The total points in the class will equal **300**. The grading scale will be as follows:

Points	Grade
300-270	4.0
269-255	3.5
254-240	3.0
239-225	2.5
224-210	2.0
209-195	1.5
194-180	1.0
< 180	0.0

Areas	Points
Lab Assignments	90
In-Class Quizzes	15
Quiz	35
Exams	100
Final Exam	60
Total Points	300

GRADING DISPUTES

Grading disputes operate as follows for labs, the quiz, and exams 1 & 2:

If a student has a dispute with a grade, they must bring it to the instructor's attention **no later than one week** after the lab/quiz/exam has been graded and returned to the student. In order to dispute a grade, a student must email or verbally explain to the instructor specifics for what they wish to dispute. They will be expected to craft a written paragraph that explains why they believe points should be granted. The instructor has final say on whether or not points will be awarded. Final exam grades will be posted on D2L as soon as they are graded. Final grades will be submitted to the registrar 24 hours after posting on D2L. It is the student's responsibility to contact the instructor within this 24-hour window about his/her final grade.

Students must discuss concerns and issues about their grade in the class *prior* to the last week of classes to have those concerns addressed by the instructor.

IMPORTANT DATES

Below are the important dates throughout the semester:

February 8th – Quiz March 1st – Exam 1 April 24th – Exam 2 May 4th – Final Exam

POLICY ON MAKE-UP ASSIGNMENTS, QUIZ, & EXAMINATIONS

Due to the setup of the class there will be **no make-up opportunities for the quiz, labs, and in-class reading quizzes**. Mark all quiz and exam dates in your schedule. For exams, a make-up option **might** be granted in the following cases:*

- 1. Illness. A medical excuse signed by one's physician must be presented to the instructor. The instructor will verify all excuses.
- 2. Extenuating circumstances. It will be the prerogative of the instructor whether or not the student will be allowed to take the makeup. This includes and is not limited to family emergencies, illness, etc.
- 3. Religious observance.

^{*}In all of the above cases, the instructor must be notified of the conflict **prior** to the exam. E-mail the instructor before the exam is to be taken. If the student is allowed to take the make-up exam, this must be made up as soon as possible. The policy for final examination make-up follows the University's Final Examination Policy.

ATTENDANCE:

Attendance is expected every week. Should an emergency arise you should contact your College's Assistant Dean for Student Affairs (Dean Dalebout in the College of Education, sdd@msu.edu), to notify them of the situation. If a death in your family occurs, you should complete the University Grief Absence Request Form as detailed in the University Grief Absence Policy as soon as possible. It may be necessary to provide documentation. In the event of an absence (regardless of University approval), it is your responsibility as a student to acquire the class notes from another classmate. Completed lecture notes will not be provided by the course instructor for any reason.

Any behavior that disrupts classroom discussion or instruction will not be tolerated, and you will be asked to leave the classroom and must meet with the instructor before re-admittance back into the class. Students whose conduct adversely affects the learning environment in the classroom may be subject to disciplinary action through the Student Faculty Judiciary process.

ADDITIONAL COURSE POLICIES

Reasonable Accommodation for Students with Disabilities:

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. If you have a diagnosed disability or believe that you have a disability that might require "reasonable accommodation" on the part of the instructor, please call The Resource Center for Persons with Disabilities (RCPD). As part of the Americans with Disabilities Act, it is the responsibility of the student to disclose a disability prior to requesting reasonable accommodation. Once your eligibility for an accommodation has been determined, you will be issued a verified individual services accommodation form. Please present this form to your instructor at the start of the term and/or two weeks prior to the accommodation date. Requests received after this date will be honored whenever possible.

Academic Integrity:

All students at Michigan State University are expected to conduct themselves with the highest standards of academic honesty and integrity. Academic dishonesty by a student will not be tolerated in any activity or academic area and will be treated in accordance with the policy in the Academic Programs Publication. Forms of academic dishonesty include falsifying attendance records for oneself or another student, plagiarism, and falsifying the graded exam or assignment material. All incidences of questionable academic integrity are construed as a serious matter and may result in a NG (0.0) for the course.

Plagiarism:

By enrolling in this course, you are indicating implicitly that you have read, understand, and accept the University's policies and procedures regarding academic integrity and dishonesty. These policies can be found at the website for <u>academic integrity</u>. Plagiarism and cheating will not be tolerated and all university policies apply. Specifically, if plagiarism or cheating is suspected then the student will be asked to meet with the instructor. If the instructor concludes that an instance of plagiarism or cheating has occurred, the student will be reported to the Dean of the student's college. Please note that plagiarism is using the ideas or writings of another as one's own. It varies in degree and severity. The most severe is the use of another's entire paper word-for-word. Less severe is the use of another's sentence, paragraph, or ideas without giving credit to that individual (i.e., without providing a reference).

The Turnitin feature in D2L will be used in this class when assignments are submitted via dropbox. Please <u>read</u> further on the cloud-based application and/or discuss any questions you have with your instructor.

"As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do."

Mandatory Reporting:

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees are required to report suspected harassment to the appropriate authorities when they become aware of matters in the course of their employment

(including, but not limited to, child neglect/abuse and sexual assault). More information about what is included in the University policy can be found on the <u>office for inclusion</u> website. Sexual assault survivors are encouraged to meet with the <u>Sexual Assault Program</u> at the MSU Counseling Center for counseling services.

Course Content and Calendar Subject to modification at instructor's discretion.

Week	Date	Торіс	Readings	Activity	
1	9-Jan	Introduction	TedTalk (D2L)	Lab 1	
1	Jan	Concepts in Tests and Measurement	Chapter 1		
	16-Jan	Levels of Variables	Chapter 3 (pg. 33-38)	Lab 2	
2	18-Jan	Using Technology and Displaying Data	Chapter 2 &	CRQ-1	
			Chapter 3 (pg. 38-41)	-	
3	23-Jan	Measures of Central Tendency	Chapter 3 (pg. 41-53)	Lab 3	
	25-Jan	Measures of Variability	Chapter 3 (pg. 41-53)	CDO 2	
4	30-Jan		,	CRQ-2	
	1-Feb	Correlation and Regression	Chapter 4	Lab 4	
5	6-Feb			Lab 4	
	8-Feb	Quiz 1	Study Notes and Readings	Lab 5	
6	13-Feb	Hypothesis Testing, T-Test, and ANOVA	Chapter 5	Lab 5	
	15-Feb 20-Feb	N D C 10 C' C D C 1			
7	20-Feb 22-Feb	Norm-Referenced & Criterion-Referenced Reliability and Validity	Chapter 6 & 7	CRQ-3	
	27-Feb	Review for Exam 1	Study Notes and Readings	CRQ-3	
8	1-Mar		Study Notes and Readings		
	5-Mar	Exam 1			
9	9-Mar	Spring Break - Campus Closed			
	13-Mar	Developing Written Tests and Surveys	Chapter 8		
10		Physical Fitness Assessment in Adults and Youth	Chapters 9 & 10;		
	15-Mar		Outside Readings	CRQ-4	
11	20-Mar	Physical Fitness Assessment in Adults and Youth	Outside Readings	Lab 6	
11	22-Mar	Assessment of Sport Skills and Motor Abilities	Cl		
10	27-Mar	Assessment of Sport Skills and Motor Abilities	Chapter 11 Outside Readings	Lab 7	
12	29-Mar	Assessment of Sport Skills and Motor Abilities	Outside Readings		
13	3-Apr	Psychological Measurements in Sports and	Chapter 12	Lab 8	
13	5-Apr	Exercise			
14	10-Apr	Measuring Special Populations	Outside Readings	CRQ-5	
14	12-Apr	Intervention Programs	Outside Readings		
15	17-Apr	Intervention Programs	Outside Readings	Lab 9	
13	19-Apr	Review for Exam 2			
16	24-Apr	Exam 2			
10	26-Apr	Review for Final Exam	Study Notes and Readings		
17	4-May	Final Exam – 7:45-9:45 am in 203 IM West	information if this course		

^{*}Readings are subject to change; the instructor will inform you if this occurs.

Important Dates:

- Martin Luther King Day Monday, January 15th (campus closed)
- Midpoint of Semester Wednesday, February 28
- Spring Break March 5th 9th
- Must have addressed concerns over your grade by April 19th
- Classes End Friday, April 27th