

**COURSE SYLLABUS**  
**Southeast Missouri State University**

**Department:** Health, Human Performance and Recreation  
**Course Title:** Assessment for Physical Educators

**Course No:** PE 310  
**Revision:** Fall 2011

**Department Approved: August 26, 2011**  
**College Council Approved: October 5, 2011**

**I. Catalog Description and Credit Hours:**

The course will explore issues pertinent to assessment and research in physical education. Emphasis will be on research designs, test construction, administration, analysis, and basic data management. Two lecture and two lab hours per week. (3)

**II. Prerequisite:** HL 231

**III. Course Objectives:**

Upon completion of the course the teacher candidate will be able to:

- A. Describe and apply physiological and biomechanical concepts related to skillful movement, physical activity and fitness. 1.1
- B. Analyze and correct critical elements of motor skills and performance concepts. 1.5
- C. Achieve and maintain a health-enhancing level of fitness throughout the program. 2.2
- D. Demonstrate knowledge of current technology by planning and implementing learning experiences that require students to appropriately use technology to meet lesson objectives. 3.7
- E. Provide effective instructional feedback for skill acquisition, student learning, and motivation. 4.3
- F. Select or create appropriate assessments that will measure student achievement of goals and objectives. 5.1
- G. Use appropriate assessments to evaluate student learning before, during, and after instruction. 5.2
- H. Utilize the reflective cycle to implement change in teacher performance, student learning, and/or instructional goals and decisions. 5.3
- I. Demonstrate behaviors that are consistent with the belief that all students can become physically educated individuals. 6.1
- J. Communicate in ways that convey respect and sensitivity. 6.4

**IV. Expectations of the Student:**

- A. Each teacher candidate will participate actively in class discussions.
- B. Each teacher candidate will complete course assignments and examinations in a timely manner.
- C. Each teacher candidate will participate in experiential laboratory and out of class experiences.
- D. Each teacher candidate will complete a unit of instruction involving the administration and analysis of FitnessGram/ActivityGram and other standardized tests in PK-12 settings.

<b>V. Course Outline/Learning Experiences:</b>	<b>Hours</b>
A. Introduction of course	2
1. Definitions and functions of measurement and evaluation	
2. Public health initiatives	
B. Introduction to research methods	4
1. Introduction to empirical research	
2. Experimental and Non-experimental studies	
3. Types of Experimental research	
4. Types of Non-experimental research	
5. Variables in research	
6. Research hypotheses, purposes, and questions	
7. Quantitative and qualitative research	
8. Ethical considerations in research	
9. Sampling techniques	
10. Preparing research reports	
11. Lab	
C. Describing and presenting test scores	4
1. Scales of measurement	
3. Measures of central tendency	
4. Measures of variability	
5. Percentiles and percentile ranks	
6. The normal curve	
7. Standard scores	
8. Frequency distribution	
9. Lab	
D. Tests of significance	4
1. Correlation—Pearson-correlation; Spearman correlation	
2. t-test—-independent and dependent t-test analyses	
3. One way analysis of variance (ANOVA)	
4. Regression analysis	
5. Chi-square analysis	
6. Use statistical software to analyze data	
6. Lab	
E. Reliability and Objectivity	4
1. Types of reliability	
2. Estimation of reliability	
3. Factors affecting reliability	
4. Types of objectivity	
5. Estimation of objectivity	
6. Factors affecting objectivity	
7. Lab	
F. Validity	4
1. Types of validity	
2. Estimation of validity	

3.	Factors affecting validity	
G.	Test characteristics, administration, and interpretation	4
1.	Test characteristics	
	a. Content-related attributes	
	b. Participant concerns	
	c. Administrative concerns	
	d. Lab	
2.	Administration	
	a. Pretest procedures	
	b. Giving the test	
	c. Posttest procedures	
	d. Lab	
3.	Evaluation	
	a. Types of evaluation	
	b. Standards for evaluation	
	c. Lab	
H.	School-based evaluation	3
1.	Issues in grading	
2.	Methods of grading	
3.	Reporting final grades	
4.	Use of electronic gradebook	
5.	Lab	
I.	Authentic and Alternative Assessment	4
1.	Characteristics of authentic and alternative assessment	
2.	Rubrics	
3.	Types of authentic and alternative assessment	
4.	Lab	
J.	Evaluating sport skill achievement	4
1.	Sport skill tests	
2.	Subjective and objective evaluation	
3.	Constructing and using rating scales	
4.	Collect, analyze, evaluate, and report assessment data	
5.	Lab	
K.	Measuring physical activity	4
1.	Importance of measuring physical activity	
2.	Instruments for measuring physical activity	
3.	Collect, analyze, evaluate, and report assessment data	
4.	Lab	
L.	Measuring physical abilities	4
1.	Theory of basic abilities	
2.	Muscular strength	
3.	Muscular endurance	
4.	Flexibility	

5.	Balance	
6.	Collect, analyze, evaluate, and report assessment data	
7.	Lab	
M.	Evaluating aerobic fitness	4
1.	Laboratory-based aerobic fitness tests	
2.	Field-based aerobic fitness tests	
3.	Collect, analyze, evaluate, and report assessment data	
4.	Lab	
N.	Evaluating body composition	4
1.	Public health risks	
2.	Laboratory body composition methods	
3.	Anthropometric assessment of body composition	
4.	Collect, analyze, evaluate, and report assessment data	
5.	Lab	
O.	Measuring in competitive sports and coaching	2
1.	Measurement challenges in competitive sport	
2.	Measuring recruits in professional sport	
3.	Measuring recruits in high school and collegiate sport	
4.	Advances in sport measurement	
5.	Collect, analyze, evaluate, and report assessment data	
P.	Evaluating knowledge	3
1.	Levels of knowledge	
2.	Types of knowledge tests	
3.	Construction and administration of knowledge tests	
4.	Analyses of knowledge tests	
5.	Lab	
Q.	Exercise psychological measurement	2
1.	Measuring attitudes	
2.	Psychological determinants of physical activity	
3.	Eating disorders	
4.	Body image	
	<b>Total Hours</b>	<b>60</b>

**V. Required Textbooks:**

Bishop, P. A. (2008). *Measurement and evaluation in physical activity applications*. Scottsdale, AZ: Holcomb Hathaway.

Patten, M.L. (2009). *Understanding Research Methods: An Overview of the Essentials (7<sup>th</sup> ed.)*. Los Angeles, CA: Pycszak Publishing.

**VI. Basis for Student Evaluation:**

A.	Quizzes	15 %
B.	Assignments/Lab	25 %
C.	Physical Fitness (Health-Related) Assessment	10 %
D.	Exams	40 %

E. Teacher candidate-constructed	
Assessment tools	<u>10 %</u>
<b>Total</b>	<b>100 %</b>

**VI. Grading Scale:**

- 90-100% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- < 59% = F

**VII. Knowledge Base:**

Baumgartner, T.A., Jackson, A.S., Mahar, M.T., & Rowe, D.A. (2007). *Measurement for evaluation in physical education & exercise science, 8<sup>th</sup> ed.* St. Louis, MO: McGraw Hill.

Brian C. C. (2008). *How to use SPSS: A step-by-step guide to analysis and interpretation, 5<sup>th</sup> ed.* Los Angeles, CA: Pyrczak Publishing.

The Cooper Institute (2007). *Fitnessgram/Activitygram: Test administration manual.* Champaign, IL: Human Kinetics.

**X. Academic Honesty Statement:**

Southeast Missouri State University's policy on Academic Honesty is summarized in the 2009-2010 Undergraduate Bulletin. Suspected academic dishonesty (plagiarism and cheating) will be handled following the *Protocol for Adjudicating Alleged Violations of Academic Honesty* as described in the policy.

**XI. Students with Disabilities:**

Southeast Missouri State University and Disability Support Services remain committed to making every possible educational accommodation for students with disabilities. Many services and accommodations which aid a student's educational experience are available for students with various types of disabilities. It is the student's responsibility to contact Disability Support Services to become registered as a student with a disability. Accommodations are implemented on a case by case basis. For more information visit the following site:  
<http://www6.semo.edu/lapdss/index.htm>.