



Fayetteville State University
School of Education
Department of Health, Physical Education and Human services

Undergraduate

PEDU 421 - Measurement And Evaluation

1. LOCATOR INFORMATION:

Semester: Fall 2009
Course and Number PEDU 421 - Measurement And Evaluation
Credit Hours: 3
Office Hours: M _____ T _____ W _____ R _____ F _____
Instructor: Dr. Peggy L. Green
Office Location: HPERC Room 327
Office Telephone: (910) 672-2609
Email: pgreen@uncfsu.edu

FSU Policy on Electronic Mail: Fayetteville State University provides to each student, free of charge, an electronic mail account (username@broncos.uncfsu.edu) that is easily accessible via the Internet. The university has established FSU email as the primary mode of correspondence between university officials and enrolled students. Inquiries and requests from students pertaining to academic records, grades, bills, financial aid, and other matters of a confidential nature must be submitted via FSU email. Inquiries or requests from personal email accounts are not assured a response. The university maintains open-use computer laboratories throughout the campus that can be used to access electronic mail.
Rules and regulations governing the use of FSU email may be found at <http://www.uncfsu.edu/PDFs/EmailPolicyFinal.pdf>

2. COURSE DESCRIPTION:

A study of measurement and evaluation in health and physical education, including the selection and administration of appropriate tests and the use of fundamental statistical procedures to calculate and interpret results.
Experiencing the methods and techniques of measurement and evaluation facilitates the learning process and promote effective use of programs in health and physical education.
As educators, we are continually called upon to make decisions that are based upon objective and subjective assessment, thus, we must be skilled in the evaluation process. Tests and measurements determine the effectiveness of programs and with greater accuracy.

3. TEXTBOOK:

Miller, David K: Measurement by the Physical Educator: Why and How. 5th edition, Benchmark Press, Inc. 2005

4. SCHOOL OF EDUCATION’S CONCEPTUAL FRAMEWORK:

The conceptual framework defines the unit’s vision which underscores the school’s purpose for preparing its candidates for teaching and leadership roles in a global society. The unit prepares candidates who support student learning, within the context of family and community participation, for a diverse, technological and global society. We achieve this vision through teaching, research, and service. Our conceptual framework serves as a lens through which we view our education professionals in the **Physical Education Program**. The themes of our conceptual framework include knowledgeable and reflective education professionals; working with families and communities; respect for diversity and individual worth; technological competence; educational applications; and caring dispositions and ethical responsibility.

5. COURSE GOALS, OBJECTIVES:

Upon completing the course requirements of Measurement and Evaluation 421, the student will be able to:

1. Construct one written sport's knowledge test in physical education including an answer sheet and one essay question and five each of the following type questions; (1) recall, (2) recognition, (alternative-response), (3) recognition (multiple choice), and (4) recognition (one set of 10 matching). (Synthesis)
2. Measure five components of physical fitness selecting a different test for each component by administering the AAHPER physical fitness tests in the laboratory segment of the class. (Analysis)
3. Apply statistical measures to collected data by completing 4 out of 6 statistical exercises in the class with 90% accuracy. (Application)
4. Collect, record, and apply data in measurable terms in five laboratory experiences with 90% accuracy. (Synthesis/Evaluation)
5. Identify five types of tests and write their purpose relative to meeting the objectives of physical education and health. (Knowledge)
6. Identify five pioneers in measurement, including their contributions to the area, complete the terminology list and (write) five abstract, obtaining a score of 90%. (Knowledge/Evaluation)
7. Develop a 15 minute conditioning session developing low intensity and high intensity exercise to raise their level of fitness and write a program.

6. GENERAL REQUIREMENTS:

- A. All students will purchase (or rent) the required textbook for the course.
- B. Class attendance is mandatory and adhere to the university absentee policy. (Page 4).
- C. All assignments are due on the stipulated date. Ten (10) points will be deducted from all late assignments.
- D. It is expected that all students will be prepared to participate fully in the planned lesson.
- E. All students will wear the Physical Education Majors uniform during all active classes.
- F. It is expected that all students will conduct themselves in a manner befitting one who is preparing to become a “professional in motion” in physical education.

7. EVALUATION CRITERIA:

Final grades are based upon the following: (all exercises examinations will be graded on a scale of 100%)

Five (5) Abstracts/Assignments (statistical problems)	15%
Three (3) Laboratory Administration (2 Labs/Written test)	35%
Five (5) Lab Critiques	05%
Mid-Term Examination	20%
Final Exam	20%
Notebook	05%

GRADING SCALE

- 92 - 100 - A
- 83 - 91 - B
- 73 - 82 - C
- 64 - 72 - D
- Below 64 - F

8. COURSE OUTLINE (with Assignment Schedule):

- A. **Practical Overview of Physical Education and Health (Chapter 1)** **1st Week**
 - 1. Definitions
 - 2. Objectives
 - 3. Aims
 - 4. Philosophy

- B. **Historical Overview of Test and Measurements**
 - 1. Pioneers
 - 2. Type of test areas
 - 3. Terminology

- C. **Physical Fitness** **2nd Week**
 - 1. Definition
 - 2. Components of Physical Fitness
 - 3. Terminology

- D. **Statistical Analysis (Chapter 3)** **3rd Week**
 - 1. Measures of Central Tendency
 - a. Mean
 - b. Mode
 - c. Median
 - 2. Measures of Variability **4th Week**
 - a. Range
 - b. Standard Deviation
 - c. Variance
 - d. Normal Curve
 - e. Skewness
 - 3. Grouping Data
 - 4. Frequency Distribution and Graphing Procedures
 - a. Frequency Polygon
 - b. Histogram
 - 5. Percentiles/Standard Scores
 - a. Q scores
 - b. T scores

6. "T" Test
7. Correlation and prediction
 - a. Rank-Difference
 - b. Product - Moment (ungrouped data)
 - c. T test
 - d. Analysis of Variance
 - e. Null Hypothesis
8. Computer Analysis of Data

**E. Tests and Grading in Physical Education
(Chapter 5,6,7,8,9)**

1. Test Selection and Evaluation
2. Test Administration
3. Test Construction (Steps)
4. Scoring/Statistical Analysis

ASSIGNMENT SCHEDULE

<u>Assignments</u> (ALL Assignments Must be Typed)	<u>Due Date</u>
1. 15 minute conditioning set (Warm-up, Aerobics, Cool-down)	1.
2. Five (5) pioneers/contribution (different test areas)	2.
3. Five (5) types of test areas (purpose relative to the objectives of physical education)	3.
4. Trace the physical fitness movement	4.
5. Identify Five (5) components of physical fitness (Include an AAHPERD test for each area.)	5.
6. *Chapter 10-20 Summarized with 2 tests.	6.
7. Terminology List Handouts/Assignments Chapters 1-22)	7.
8. Five Abstracts	8.
9. Written Sports Knowledge test	9.
10. Carlson fatigue Curve test	10.
11. Lab Administration Sheets	11.
12. Notebook	12.

*Test should include

- A. Objective (purpose)
- B. Value
- C. Application (age/sex)
- D. Equipment/materials
- E. Directions (Testing procedures)

- F. Scoring
- G. Evaluation

LABORATORIES

<u>LAB DATES</u>	<u>TEST AREAS</u>	<u>LAB ADMINISTRATOR</u>
Lab 1. _____	Anthropometry/Motor Ability tests (agility, & Kinesthesia)	1.
Lab 2. _____	Physical fitness I (Power, Speed, & Strength)	2.
Lab 3. _____	Physical fitness II Flexibility, C-V, & muscular endurance)	3.
Lab 4. _____	Individual & Dual Sports Skills test (Tennis, Badminton, Golf, etc.)	4.
Lab 5. _____	Team Sports skills tests (Football, Basketball, Softball, Volleyball, Racquetball, Soccer and etc.)	5.
Lab 6. _____	Sociometrics: Measurement of social skills in health & physical education.	6.
Lab 7. _____	Construction of written knowledge tests in physical education.	7.

ABSTRACTS (5)

1. Each student will be responsible for reading 5 different articles or researched projects and write an abstract of their reading.
2. The abstracts must be relative to tests and measurement lab being administered.
3. The abstracts should be one page in length and no more than two pages if necessary.
4. The abstracts must be **typed**, submitted on the day of the lab, and should not date past 1990.
5. Articles should be summarized and personal comments included.
6. Research should include the purpose, method of collecting data, results etc and personal comments.

ABSTRACT TOPICS

DUE DATES

1. Anthropometry, or Somatotype	1.
2. Physical Fitness (C-V, Muscular endurance, power, speed, strength & Flexibility)	2.
3. Individual & Dual Sports	3.
4. Team Sports	4.
5. Sociometrics/Health	5.

14. **TEACHING STRATEGIES:**
- A. Lectures-Discussion
 - B. Individual and Group Testing Projects
 - C. Individual Research Reports from Scholarly Literature
 - D. Large and Small Group Discussion
 - E. Resource Persons
 - F. Technologies (Internet Research)

15. **DISABLED STUDENT SERVICES:** In accordance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ACA) of 1990, if you have a disability or think you have a disability to please contact the Center for Personal Development in the Spaulding Building, Room 155 (1st Floor); 910-672-1203.

ABSENTEE POLICY

In addition to the University's policy on absenteeism, any unexcused absence above the allowable minimum will result in one (1) point being deducted from the student's final grade average. Example: Final grade average 92 = A; 3 unexcused absences = minus 3 points; 3 points deducted (92 - 3 = 89) = B grade.

Excused absences include **DOCUMENTED** emergencies, medical or otherwise; University service, i.e., athletics, band, choir, etc., or instructor's approval. **This policy includes all levels of classes (100 thru 400 level.)**

16. **REFERENCES (Suggested Readings, Internet and/or Multi-media Resources):**

A. Books

Johnson, Barry L., and Nelson, Jack K.: Practical Measurement for Evaluation in Physical Education. Burgess Publishing Company, 1986 Fourth Edition.

Schmottlach, Neil and McManama, Jerre Physical Education Handbook, 7th Edition, 1997 Allyn and Bacon.

B. Periodicals 1989 and up

- 1. Journal of Physical Education, Recreation, and Dance (JOPERD)
- 2. Health Educator
- 3. Research Quarterly for Sport and Physical Education
- 4. The Physical Educator

C. **Websites:**

- 1. www.aahperd.org
- 2. www.dpi.state.mc.us
- 3. www.nea.org
- 4. www.mypyramid.gov
- 5. www.ncate.org
- 6. www.who.int
- 7. www.titleix.to
- 8. www.ncaa.org
- 9. www.theciaa.com
- 10. www.omnidan.com