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**Undergraduate Distance Education Review Form**  
(Required for all courses taught by distance education for more than one-third of teaching contact hours.)

Existing and Special Topics Course

Course: HPED341 Evaluation in Health and Physical Education

Instructor(s) of Record: Dr. Richard Hsiao

Phone: 724-357-0123

Email: hsiao@iup.edu

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**Step One: Proposer**

A. Provide a brief narrative rationale for each of the items, A1- A5.

1. How is/are the instructor(s) qualified in the distance education delivery method as well as the discipline?  
Dr. Richard Hsiao has taught the HPED341 Evaluation in Health and Physical Education content at IUP in the past three years. Dr. Richard Hsiao has taught several required major courses in the Department of Health and Physical Education over the past 8 years. He has not only taught these courses using the traditional face-to-face format, but he has also taught numerous other sport management and health and physical education courses using distance education. He has taught these courses regularly in the fall, spring, summer and winter semesters. Dr. Richard Hsiao has integrated Moodle or Desire2Learn online learning management systems (OLMS) each semester in face-to-face classes to deliver course-related information. Dr. Richard Hsiao has also completed an advanced Moodle and Desire2Learn (D2L) workshop taught by the IUP IT Support Center.
2. How will each objective in the course be met using distance education technologies?  
Objective #A - Identify relationships that exist between measurement, evaluation and the objects of the health education and physical programs.  
How Objective #A will be met - Assigned readings will broadly cover evaluation and measurement in health education. Materials that relate to the definition and background of a variety of health education and physical education programs will also be assigned. In addition, practical evaluation and measurement-related websites will be introduced to enhance students' interest and learning motivation. Module-related discussion board questions will be assigned to facilitate students' learning. Students required to participate in module-related discussion forum weekly through OLMS.  
Objective #B - Perform elementary statistical functions and interpret the statistical concepts of research studies.  
How Objective #B will be met - Course-related readings will include a wide range of perspectives, including theories of elementary statistical functions and research examples

from the discipline of health and physical education. Basic theoretical assumptions of theory are explained and exercises are assigned that require students to critique and apply elementary statistical functions and theories from perspectives of health and physical education. Students will have opportunity to ask questions or discuss exercise questions through OLMS discussion board after they submitted their exercise assignments via the OLMS Dropbox.

Objective #C - Analyze the physical growth and development of children using the National Center for Health Statistics or The American Medical Association's Growth Charts.

How Objective #C will be met - The National Center for Health Statistics and The American Medical Association's Growth Charts will be introduced. Specific assignments related to "how to" analyze and develop children's growth will be assigned by applying the National Center for Health Statistics and the American Medical Association's Growth Charts. Students will be required to complete a related assignment and upload it to the Dropbox in the OLMS course.

Objective #D - Conduct needs assessments and plan intervention techniques toward achieving the 1990 and Year 2000 health objectives for the nation's schools.

How Objective #D will be met - A number of required readings related to needs assessments, such as the FITNESSGRAM Test Battery will be highlighted and introduced to students. In addition, discussion on topics related to planning intervention techniques towards meeting health objectives will be held using the discussion board through OLMS. Students will be able to get a further understanding about the obligations of being a good health educator and how to develop a variety of programs that would address the health objectives for the nation's schools.

Objective #E - Distinguish between the health-related and the skill-related components of fitness.

How Objective #E will be met - A paper designed to developing students' understanding and critical thinking about the health-related and the skill-related components of fitness will be assigned for students to read. Students will then be asked to write an article review to compare and contrast the differences between health-related and skill-related components of fitness. . In addition, assigned readings in the area of fitness components will help students gain an in-depth understanding about how to design, evaluate and improve skills in health and fitness. The OLMS discussions will be held to facilitate student's understanding of the differences of health-related and skill-related components of fitness.

Objective #F - Construct valid teacher-made tests.

How Objective #F will be met - The basic concepts of validity and reliability will be introduced through course materials. Through assigned readings, students will be able to understand the concept of valid teacher-made tests and be able to apply knowledge and concepts towards application of constructing valid tests in their future teaching careers. Students will be required to post their self-designed test questions to the discussion board so their peers can provide feedback. Also a discussion question related to validity and

reliability of teacher-made test will be assigned to enhance students learning in terms of this specific topic.

Objective #G - Demonstrate the relationship between the application of measurement results to program accountability.

How Objective #G will be met - Related readings will be assigned. To help students further understand and apply measurement concepts, an article critique will be assigned through the course OLMS. Focus will be on applying measurement concepts and accountability of any programs in the area of health and physical education. Students will have an opportunity to further discuss their opinions and provide feedback about the assigned article through module-related discussion board participation.

Objective #H - Administer tests in the field of health, physical education and exercise science to peers.

How Objective #H will be met - Identification and discussion of the factors related to administering tests will be introduced. Students will be expected to critically discuss issues related to administering tests in the area of health, physical education and exercise science using course OLMS discussion forum. Students will be asked to administer and video record a fitness-related test (Objective F) to their family or friends and post it through OLMS module discussion board.

Objective #I - Organize, administer and analyze results of the measurement schedule in the health education and physical education programs.

How Objective #I will be met - Course materials will be introduced to this topic and students will be provided assistance in understanding problems associated with the measurement and evaluation of instructional effectiveness. Students will also have practice in identifying and analyzing observational cases measured by programs in health and physical education through module-related exercises via OLMS.

Objective #J - Examine and evaluate methods of grading students in health and physical education.

How Objective #J will be met - Information related to grading will be addressed, such as differentiating between norm-referenced and criterion-referenced grading and understand the intent and use of predetermined performance-based objectives in the decision making process. An OLMS module assignment will be given to help understand student comprehension in terms of examination and evaluation methods related to grading in the area of health and physical education.

In summary, the OLMS technologies for distance education will be applied to meet the above objectives. The design of this course will focus on student learning, motivation and satisfaction. The instructor will provide PowerPoint slides, implement use of modules, journal articles, statistical practice questions and discussion boards in this particular online course to facilitate teaching and student learning. Each student is required to submit his/her questions, opinions and comments at the end of each module and participate in module-related discussion forums. This approach is being used to foster learning efficiency and

understanding of course concepts for each individual student through distance education and also encourage students' self-motivation.

3. How will instructor-student and student-student, if applicable, interaction take place?  
The OLMS affords opportunities for students to be involved in the class with the instructor and other students via active online modules, discussion boards, e-mail, and assignment drop boxes. The discussion board function provides a variety of interactional opportunities between the instructor and the student. Instructor-provided prompts will encourage dialogue between the instructor and student as well as student-to-student. The discussion board feature also provides opportunities for students to ask questions to the instructor related to general course questions. OLMS also allows integration of the video sharing feature and posting of PowerPoint presentations with voice narration. These OLMS functions will increase students' interest and motivation in learning and will increase the interaction between the instructor and students and between students and students. Assignments will prompt students to complete a self-test of their understanding of the text content and discuss results with the instructor. Instructional feedback will be provided through feedback section of the OLMS.
4. How will student achievement be evaluated?  
The course is divided into 3 units, with each unit containing 5 modules for a total of 15 modules. After each unit, tests will be administered using the OLMS for a total of 2 exams for the course. In addition, four real-life article analyses will be assigned to facilitate critical and creative thinking. Ten sections of discussion forum communications will be conducted to enhance the understanding of the course contents and enhance interests, motivation and satisfaction. Statistical exercise questions also will be assigned to students as assignments/homework to facilitate students' learning. The achievement and performance of students will be evaluated and measured using the aforementioned assignments and exams. Rubrics will be provided to the students and utilized by the instructor for all assignments.
5. How will academic honesty for tests and assignments be addressed?  
All evaluation techniques will use all safe guards available. A wide variety of evaluation methods will be applied to prevent academic dishonesty, including three timed exams, discussion boards, case studies and an aquatic journal review paper. Exams will be timed so that students have enough time to answer all the questions however, they will not have enough time to read through their textbook to find all of the answers). Exam questions will be focused on comprehension and application of the material instead of just questions that focus on rote memorization. Additionally, OLMS will be used to randomly selected questions, so that each student is presented with a different set of exam questions. Also, a user password can be assigned one hour before the test time through the student's email account to increase academic honesty for tests. Lastly, the academic integrity policy will be addressed and all students' papers and assignments will be submitted to the Turnitin.com website to verify originality. All of the above examples are methods the instructor can instill to prevent academic dishonesty.


- B. Submit to the department or its curriculum committee the responses to items A1-A5, the current official syllabus of record, along with the instructor developed online version of the syllabus, and the sample lesson. This lesson should clearly demonstrate how the distance education instructional format adequately assists students to meet a course objective(s) using online or distance technology. It should relate to one concrete topic area indicated on the syllabus.

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**Step Two: Departmental/Dean Approval**

Recommendation:  Positive (The objectives of this course can be met via distance education)

Negative

  
\_\_\_\_\_  
Signature of Department Designee

9/24/13  
\_\_\_\_\_  
Date

Endorsed:   
\_\_\_\_\_  
Signature of College Dean

9.25.13  
\_\_\_\_\_  
Date

Forward form and supporting materials to Liberal Studies Office for consideration by the University-wide Undergraduate Curriculum Committee. Dual-level courses also require review by the University-wide Graduate Committee for graduate-level section.

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**Step Three: University-wide Undergraduate Curriculum Committee Approval**

Recommendation:  Positive (The objectives of this course can be met via distance education)

Negative

Gail Sedquist  
Signature of Committee Co-Chair \_\_\_\_\_ Date

Forward form and supporting materials to the Provost within 30 calendar days after received by committee.

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**Step Four: Provost Approval**

Approved as distance education course

Rejected as distance education course

Prof. S. McCreary  
Signature of Provost \_\_\_\_\_ Date 9/3/13

Forward form and supporting materials to Associate Provost.

## SYLLABUS OF RECORD

### I. CATALOG DESCRIPTION

HP 341 Evaluation in Health and Physical Education 3  
credits  
3 lecture hours (3c-  
01-3sh)

Evaluation theory, instructional objectives, and cognitive test construction; technical and practical considerations in testing and interpretation of test results in both health and physical education.

### II. Course OBJECTIVES

At the completion of this course each student will:

- A. identify relationships that exist between measurement, evaluation and the objectives of the health education and physical education programs.
- B. perform elementary statistical functions and interpret the statistical concepts of research studies.
- C. analyze the physical growth and development of children using the National Center for Health Statistics or The American Medical Association's Growth Charts.
- D. conduct needs assessments and plan intervention techniques toward achieving the 1990 and Year 2000 health objectives for the nation's schools.
- E. distinguish between the health-related and the skill-related components of fitness.
- F. construct valid teacher-made tests.
- G. demonstrate the relationship between the application of measurement results to program accountability.
- H. administer tests in the field of health, physical education and exercise science to peers.

- I. organize, administer and analyze results of the measurement schedule in the health education and physical education programs.
- J. examine and evaluate methods of grading students in health and physical education.

### III. COURSE OUTLINE

- A. UNIT I - The Nature of Measurement and Evaluation (5 hours)
  - 1. Definitions and terminology
  - 2. Formative evaluation vs. summative evaluation
  - 3. Norm referenced vs. criteria referenced evaluations
- B. UNIT II - Elementary Statistics (9 hours)
  - 1. Measurement of central tendency
  - 2. Measures of variability
  - 3. Correlation
  - 4. Standard score relationships
  - 5. Research and the significance of difference
- C. UNIT III - Assessing the National Health Objectives and Behavioral Outcomes (1990 and year 2000) (10 hours)
  - 1. The role of prevention
  - 2. Health in the work force
  - 3. Health in the school and non-school setting
- D. UNIT IV - The Characteristics of a Good Test (3 hours)
  - 1. Validity, reliability and objectivity
- E. UNIT V - Test Construction - Cognitive Health Tests (5hours)



1. Table of specifications
  2. Behavioral objectives
  3. Common errors and suggestions
- F. UNIT VI - Program Evaluations (6 hours)
1. Course
  2. Instructor
  3. Program

G. UNIT VII -- Grading in Health and Physical Education  
(4 hours)

1. Normative
2. Criterion referenced

IV. EVALUATION METHODS

- 10% Completion of homework assignments  
(5 assignments: assigned a letter grade)
- 25% Formative evaluations designed to measure student's understanding and application of course content
- 25% Formulation of objectives, a table of specifications, and a teacher-made test. The student will choose one of the health instruction topics from the 1990 or Year 2000 national health objectives. Each of the student objectives will be referenced to specific test questions. In addition, the student will indicate the level of Bloom's cognitive domain measured by each question (for example: knowledge, comprehension, application, analysis, synthesis, or evaluation.)
- 40% Summative evaluations (midterm and final), designed to be comprehensive enough to cover the entire course. Questions will be multiple choice, true and false, and short answer. (20% for each test)

V. REQUIRED TEXTBOOKS AND SUPPLEMENTAL READINGS

A. Textbooks

American School Health Association, (1988). Achieving the 1990 health objectives for the nation, Tichenor Publishing.

Safrit, Margaret J., (1990). Measurement in physical education and exercise science, Times Mirror/Mosby.

B. Supplemental Readings

Pollock, Marion, (1987). Planning and implementing health education in schools, Chapter 7 and 8, Mayfield Pub. Co.

\*Read, Donald and Greene, Walter. (1980). Creative teaching of health. (Part V: Creative Evaluation and Professional Growth) Macmillan Pub. Co., Inc.

## I. BIBLIOGRAPHY

Barrow, H.M. and Rosemary McGhee. (1989). A practical approach to measurement in physical education, Lea and Febiger.

Baumgartner, Ted A. (1987). Measurement for evaluation and exercise science. 3rd ed.: Wm. C. Brown.

\*Bloom, Benjamin S. (1956). Taxonomy of educational objectives, McKay, Inc.

Green, Laurence W. (1985). Measurement and evaluation in health education and health promotion. Mayfield Publishing Co.

\*Gronlund, Norman E. (1965). Measurement and evaluation in teaching, Macmillian Co.

\*Johnson, Barry and Jack Nelson. (1969). Practical measurements for evaluation in physical education. Burgess Publishing Co.

\*Mager, Robert F. (1977). Preparing instructional objectives, Fearon Publishing.

\*Mathews, Donald K., (1978). Measurement in physical education, Saunders Co.

Nelson, Steven, (1986). How healthy is your school, guidelines for evaluating school health promotion, Published in Collaboration with American Alliance for Health, Physical Education, Recreation and Dance/Association for Advancement of Health Education/American School Health Association.

\*Popham, James W. (1980). Evaluating instruction, Prentice Hall, Inc.

\*Solleder, Marian. (1979). Evaluation instruments in health education, AAHE - AAHPERD.

Windsor, Richard., et al. (1984). Evaluation of health promotion and education programs, Mayfield Publishing Co.

\*Zapka, Jane (Ed.) (1982). Research and evaluation in health education: Volume 3 of SOPHE Heritage Collection Monographs, Third Party Publishing Co.

\*historical resource

**ONLINE SYLLABUS  
FOR  
HPED 341 EVALUATION IN HEALTH AND PHYSICAL EDUCATION**

**I. GENERAL INFORMATION**

Instructor:	Richard Hsiao
Office:	114 Zink Hall
Office Phone:	724-357-0123
Office Email:	<a href="mailto:hsiao@iup.edu">hsiao@iup.edu</a>
Office Hours:	Online
Day and Time:	Distance Education

**II. COURSE DESCRIPTION**

Evaluation theory, instructional objectives, and cognitive test construction; technical and practical considerations in testing and interpretation of test results in both health and physical education.

**III. OBJECTIVES**

Upon completion of this course the student will be able to:

- Identify relationships that exist between measurement, evaluation and the objects of the health education and physical programs.
- Perform elementary statistical functions and interpret the statistical concepts of research studies.
- Analyze the physical growth and development of children using the National Center for Health Statistics or The American Medical Association's Growth Charts.
- Conduct needs assessments and plan intervention techniques toward achieving the 1990 and Year 2000 health objectives for the nation's schools.
- Distinguish between the health-related and the skill-related components of fitness.
- Construct valid teacher-made tests.
- Demonstrate the relationship between the application of measurement results to program accountability.
- Administer tests in the field of health, physical education and exercise science to peers.
- Organize, administer and analyze results of the measurement schedule in the health education and physical education programs.
- Examine and evaluate methods of grading students in health and physical education.

**Required Textbook**

Title: *Measurement and Evaluation in Physical Education and Exercise Science*

Author: Lacy, A.

Publisher: Benjamin Cummings

Edition: 6<sup>th</sup>

Year of Publication: 2011

eText: ISBN-9780321696182

Print: ISBN-9780321666550

#### IV. Grading Policies

**Attendance** in this course is indicative of your professional attitude and is necessary to derive maximum benefit from the class. Students are responsible for all the material covered during each class and any work missed during your absences may not be made up (unless the absence is excused).

Students must attend (defined as participating in the Desire2Learn (D2L) module discussion, logging in to the D2L and interacting; posting questions, thoughts, homework assignments, etc.) online class during the first week, and at least 2 times per week thereafter. Extended absences, defined as failure to come to class more than a week; failure to post into the D2L classroom for more than five days, must be coordinated with the instructor. If you have any questions related to the course, please contact the course instructor.

Participation includes completing and submitting homework assignments by their respective due dates, and evaluation of group presentations and group members. Active participation in class discussions is expected in order to demonstrate full preparedness for each class.

Grade	Points	Grade percentage
Exams	200	20%
Assignments	180	18%
Discussion forums	300	30%
Research Paper/Presentation	150/50	20%
Article Analysis * 4	120	12%
Total	1000	100%

The official university grading scale appropriate for your course level:

#### Grading System:

Letter Grade	Suggested Numerical Equivalent	Points
A	90-100	4.00
B	80-89	3.00
C	70-79	2.00
D	60-69	1.00
F	0-59	0.00
I	Incomplete	
W	Withdrawn	

#### Use of TURNITIN

Please understand that in taking this course your assignments may be submitted to Turnitin.com and reviewed for textual similarity suggestive of plagiarism. All submitted papers are subsequently included as source material in the Turnitin.com database for the purpose of detecting plagiarism in other submitted work. Please review Turnitin.com "terms of use agreement" should you have any questions.

## Discussion Rubric

**Frequency of Postings** – Students will be required to submit at least 2 postings per forum per week. The quality of participation and learning increases when postings are spread out over the course of the forum. This method of posting provides a greater ability to synthesize other perspectives, demonstrate and increase student listening skills, and contribute more fully to an evolving discussion.

**Quality of Postings** – The quality of your postings will be evaluated using the following criteria:

Evidence that you have synthesized readings and main concepts

Clear demonstration that you are listening to peers and synthesizing their comments

Demonstration of a solid understanding of the topic area

On-topic postings that contribute to the quality of the discussion

Attention to correct grammar and spelling

Well-organized, well-constructed postings that exhibit the following:

Evidence that you can present multiple informed opinions or points of view based on rational discourse, readings, observations of others, relationship to your past experiences, etc.

Reference where possible to personal experience that is related to the topic area

Inclusion of additional resource information, links, news, or other elements that go beyond the minimum posting requirements to enhance the dialogue and take it to a deeper level

Use of proper “netiquette”

## Discussion Rubric: Grading

30% of the assessment criteria for this course will involve quality and quantity of your participation in the discussion forum. The following is an outline of my expectations for your discussion board postings and how they will be assessed.

Quantity of postings: A minimum of 2 postings per forum per week. You need to spread out your postings.

Discussion contributions are graded on the following points:

	Unsatisfactory	Satisfactory	Exemplary
Number of postings as outlined in the syllabus	0	1	2
Contributions spread out over the duration of the module	0	1	2
Clear synthesis and inclusion of material	0	.5	1
Evidence of “listening” to peer postings and responding	0	.5	1
Grammar and Spelling	0	1	2
Taking the dialogue to a deeper level	0	1	2

Total			10
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**Research Paper:**

Write a research paper about a health and physical education -related topic with your group members (3 students per group). Your topic must be pre-approved by the instructor by the 2<sup>nd</sup> week of the semester. The paper must include reference pages. The final draft of the paper is due by **XX,XX,XXXX**. Save your file as: Title of the research paper\_research.doc(x). Upload the file to the Dropbox research paper folder. PowerPoint slides also need to be uploaded to the Dropbox PowerPoint folder before your scheduled group presentation day.

**Requirements:**

- ❖ Cover page (including proof read information on the bottom of this page)
- ❖ Table of content
- ❖ Paper to be 10 to 15 typed pages
- ❖ Times New Roman font; size 12
- ❖ APA (6th ed.) style required
- ❖ Minimum of 10 references required (journal articles and books, etc.) No more than 2 reference pages.
- ❖ Double-spaced

**Research Paper and Presentation Rubric:**

Grading Criteria	Points	Points Earned
<b>Content</b>		
<b>Ideas and their structure</b> Clear topic (idea) (10) Logic and development of topic (10) Overall structure and transitions (10)	30	
<b>Analysis</b> Literature related to topic (10) Literature Analysis & statistics (20)	30	
<b>Supporting evidence</b> Quality/quantity of sources (20) Accurate citation, quotation, etc. (10)	30	
<b>Grammar, spelling, punctuation</b> Clear sentence structure (20) Appropriate word choice/Correct spelling (10) Proof read by your peer (10) Formatting requirements met (APA) (20)	60	
<b>Presentation</b> The PowerPoint has clear organization and logical flow of ideas. Introduction provides sufficient background on the topic and previews major points well. Conclusion is logical and flows from the body of the paper. Slide transitions are present. (50) **Please refer to the presentation rubric for more detailed	50	

information		
Total	200	

### Article Analysis:

Students will be assigned 4 articles related to health and physical education research. An in-depth analysis report (2pages) about the article should be submitted to digital drop box before the due date.

Article Analysis Rubric:	Possible Points	Points Earned
<b>Analysis</b> Background information Critique of the article	20	
<b>Grammar, spelling, punctuation</b> Correct spelling Clear sentence structure Appropriate word choice	10	
<b>Total</b>	30	

### Quizzes, Assignments and Exam:

Quizzes, assignments and examination will cover course content from the textbooks, PowerPoint slides and chapter-related Excel practice questions. The questions on the exam will consist of both short answer and essay.

### Assignments & Schedule

Week	Topics	Readings/Assignments/Exams/Due Dates
1	<i>Chapter 1</i> Introduction to Measurement and Evaluation	~ <i>Student Lounge Participation</i> ~ <i>Week 1 Discussion Board Posting due</i>
2	<i>Chapter 2</i> Linking Program Development with Measurement and Evaluation	~ <i>Week 2 Discussion Board Posting due</i> ~ <i>Article Analysis #1 posted on D2L due</i>
3	<i>Chapter 3</i> Basic Statistics	~ <i>Week 3 Discussion Board Posting due</i>
4	<i>More Statistics</i>	~ <i>Week 4 Discussion Board Posting due</i>
5	<i>Chapter 4</i> Criteria for Test Selection	~ <i>Article Analysis #2 posted on D2L due</i> ~ <i>Week 5 Discussion Board Posting due</i>
6	<i>Chapter 5</i> Alternative Assessment	~ <i>Week 6 Discussion Board Posting due</i>



7	<i>Chapter 6</i> Measuring Health-related Physical Fitness and Physical Activity	
8	Spring Recess No Class	
9	<i>Chapter 7</i> Measuring Psychomotor Skills	<i>~Week 8 Discussion Board Posting due</i>
10	<i>Chapter 8</i> Measuring Cognitive Knowledge	<i>~ Article Analysis #3 posted on D2L due</i> <i>~Week 9 Discussion Board Posting due</i>
11	<i>Chapter 9</i> Measuring Affective Behaviors	<i>~Week 10 Discussion Board Posting due</i>
12	<i>Chapter 10</i> Grading	<i>~Research paper presentation</i>
13	<i>Chapter 11</i> Using Self-Evaluation to Improve Instruction	<i>~Week 12 Discussion Board Posting due</i> <i>~Research paper presentation</i>
14	<i>Chapter 12</i> Measurement and Evaluation in Activity- based Settings	<i>~Research paper presentation</i> <i>~ Article Analysis #4 posted on D2L due</i>
15	Final Exam Review	<i>~Research paper presentation</i> <i>~Research Paper due</i>
16	<i>Final exam Week</i>	

### Course Structure / D2L Tools

Your course is organized through D2L. Below are the tools in your class, how we will be using them, and expectations associated with each. Take time to acclimate yourself to the tools and contact me if you have questions.

<b>Button</b>	<b>Description</b>	<b>You Should...</b>
Announcements	The Announcements area is used to post day-to-day course details such as the status of or directions for assignments and discussions.	Students are expected to check the announcements on a regular basis, at least several times each week.
<u>Content: Syllabus</u>	The course syllabus and any supporting documents will be found here.	Students are required to review the syllabus at the start of each term. It is recommended that the syllabus be downloaded for future reference.
<u>Course Documents</u>	The Course Documents area will contain course lecture, readings, activities, and evaluations. This section should also contain a checklist summary of assignments for the module. Additional links, resources, etc. are posted within the folders on occasion.	Students are expected to check this area at the start of each module and throughout the module week to review course materials.
<u>Email</u>	Email is to be used sparingly. The primary communication tool areas for the course include announcements, and discussion forums (ask instructor).	It is required that the use of email be limited to comments and questions of a personal or sensitive nature.
<u>Discussion Board Forums</u>	The threaded discussion forums will be the primary area for discussion and collaboration throughout this class.	Students are expected to participate and contribute on a regular basis. Refer to the Discussion Rubric, Participation Policy, Attendance Policy and Grading Policy sections for detailed information on student expectations.
Faculty	Instructor information is located in this area.	Students can access Instructor background and contact information here.

**Academic Honesty Policy:** Indiana University of Pennsylvania is based on the premise that each student has the responsibility to: 1) uphold the highest standards of academic integrity in the student's own work, 2) refuse to tolerate violations of academic integrity in the academic community, and 3) foster a high sense of integrity and social responsibility on the part of the university community (IUP Student Handbook – Academic Integrity Policy and Procedures, see <http://www.iup.edu/registrar/catalog/acapolicy>).

**Technical Support:** Support for technology and D2L software issues can be found at [www.iup.edu/techsupport](http://www.iup.edu/techsupport) or by dialing 724-357-4000.

## MODULE 1

### INTRODUCTION TO MEASUREMENT AND EVALUATION



#### **OBJECTIVES:**

1. Define evaluation and measurement.
2. Understand the relationship among test, measurement and evaluation.
3. List and describe various ways that measurement and evaluation can be used in activity-based settings.
4. Identify current trends that impact measurement and evaluation practices.

#### **ASSIGNMENTS:**

1. Read Chapter 1 of the textbook "Introduction to Measurement and Evaluation".
2. Look over the PowerPoint slides prepared by the Instructor and post any questions you have on Discussion Board.
3. Review the Key Terms found on the Title page of Chapter 1.
4. Answer Week 1 Discussion forum question and provide feedback for your peers.
5. Post any questions about this module that you may have on the "Ask the Instructor" under Discussions section so that others in the class can benefit from your questions.
6. The information from this module will be included in the Unit I Test.
7. All assignments and readings related to module 1 need to be completed by XX,XX,XXXX.

#### **ADDITIONAL RESOURCES:**

American Alliance for Health, Physical Education, Recreation, and Dance. (1992). *Outcomes of Quality Physical Education Programs*. Reston, VA: AAHPERD.

Hedley, A. A., Ogden, C. L., Johnson, C.L., Carroll, M.D., Curtin, L. R., and Flegal, K.M. (2004). Overweight and Obesity Among U.S. Children, Adolescents, and Adults, 1999-2002. *Journal of the American Medical Association* 291: 2847-2850.

Mokdad, A., Marks, J., Stroup, D., and Gerberding, J. (2004). Actual Causes of Death in the United States, 2000. *Journal of the American Medical Association* 291(10): 1238:1245.

National Association for Sport and Physical Education. (2004). *Moving into the Future: National Standards for Physical Education*. St. Louis, MO: Mosby.

U.S. Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and Improving Health*. 2<sup>nd</sup> ed., November. Washington, DC: Government Printing Office.

U.S. Department of Health and Human Services. (2001). *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Services, Office of the Surgeon General.

## Chapter 1 PowerPoint outline, discussion forums and exam questions

### Chapter 1 PowerPoint outline

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#### Chapter 1

Introduction to Measurement and Evaluation

#### Measurement and Evaluation in Your Daily Routine

alarm clock  
gasoline gauge  
speedometer  
meeting new people  
opinion of this class

#### Professional Measurement and Evaluation

protocols for assessing injuries and charting rehabilitation  
statistical information that coaches collect in athletics  
fitness testing in schools  
assessing a client's fitness level and evaluating progress

#### Types of Assessment

Quantitative  
time in one mile run  
score on basketball spot shooting test  
grade on weight training exam  
Qualitative  
"excellent" ranking on throwing form  
checklist on golf swing  
score on gymnastics routine

#### Test, Measurement, and Evaluation

Test – instrument, protocol, or technique that measures attribute of interest  
Measurement – process of collecting data on attribute of interest  
Evaluation – process of interpreting the collected measurement to make professional judgment of value or worth

#### Uses of Measurement and Evaluation

Diagnosis  
By diagnosing weaknesses, the instructor is able to concentrate on these areas to help the individual or group learn.  
Ex, athletic trainers diagnose injuries in order to prescribe treatment.

#### Uses of Measurement and Evaluation (Cont.)

Classification  
From an educational standpoint, it is sometime advantageous to divide students into either homogeneous or heterogeneous groups based on some attribute.

### **Uses of Measurement and Evaluation (Cont.)**

#### **Achievement**

Refer to the final ability level at a designated point in time, often coinciding with the end of a unit in school settings.

The measurement of achievement is normally made relative to some standard or criterion.

### **Uses of Measurement and Evaluation (Cont.)**

#### **Improvement**

The difference in performance between an initial point and a later point in time.

The best reason to measure improvement is to provide encouragement and information on performance to less skilled members of a group.

### **Uses of Measurement and Evaluation (Cont.)**

#### **Motivation**

Provide motivation to participants in school and non-school settings.

Ex, if skill tests are given at the beginning and end of a unit, many students will be motivated to try to improve their performance scores.

### **Uses of Measurement and Evaluation (Cont.)**

#### **program evaluation**

evaluating units of instruction

evaluating overall curriculum

instructional effectiveness

public relations

Advocating for your program with effective public relations strategies is a necessity.

### **Uses of Measurement and Evaluation (Cont.)**

#### **Prediction**

It would be desirable to predict future happenings or results from current or past data.

Ex, professional athletic teams do extensive testing to prepare for draft day in order to evaluate the potential future success of the player selected.

### **Current Trends**

public health initiatives

promotion of physical activity

problems with obesity

evaluation standards for school programs

alternative assessments

rapid technological advances

### **Healthy People 2010 Goals**

Increase quality and years of healthy life

Eliminate health disparities

Focus areas:

Access to quality health services

Diabetes

Food safety.....

### **Evaluation Standards for School-based Programs**

The National Association for Sport and Physical Education (NASPE) sponsored a project resulting in Outcomes of Quality Physical Education Program (AAHPERD, 1992).

Which included 20 outcome statements culminating in a definition of a physically educated person.

This was one of the first efforts at developing national evaluation standards. (Box 1.4)

### **National Standards for Physical Education**

Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.

Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.

Participates regularly in physical activity.

### **National Standards for Physical Education**

Achieves and maintains a health-enhancing level of physical fitness.

Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

### **Summary**

Tests are tools or instruments of measurement;

Measurement is a major step in evaluation;

Evaluation is an all-encompassing summative process that makes qualitative decisions based on data generated from tests and measurements.

### **Questions?**

### **Discussion forums**

---

1. Illustrate your understanding of the difference between test, measurement, and evaluation:  
Please describe a measurement that you use in your normal daily routine to make evaluations.
2. How do professionals in various activity-based jobs use measurement and evaluation in performing their jobs



## Exam questions

---

### TRUE/FALSE

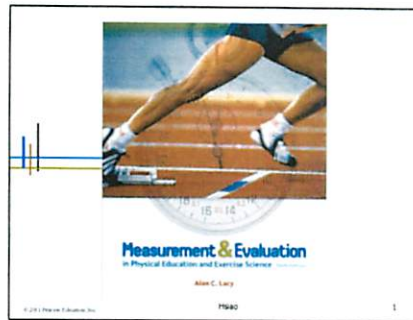
1. The task of administering a test for the purpose of obtaining a quantifiable score is referred to as evaluation.
2. Comments such as "outstanding" and "satisfactory" as related to performance are referred to as examples of qualitative measurement.
3. Scores that can be displayed in numeric form (such as an individual's time on a mile run) are examples of qualitative measurement information.
4. The process of translating test results into meaningful information that will aid the instructor in making judgments and rendering objective decisions is referred to as evaluation.
5. Measurement and evaluation are synonymous terms.
6. Measurement precedes evaluation.
7. Instruments, protocols, and techniques used to measure a quantity or quality of properties are referred to as tests.
8. The process of collecting data on the property or attribute of interest is referred to as evaluation.
9. Test, measurement, and evaluation are synonymous terms.
10. Measurement can be utilized to diagnose, classify, and determine achievement and improvement of students.

### MULTIPLE CHOICE

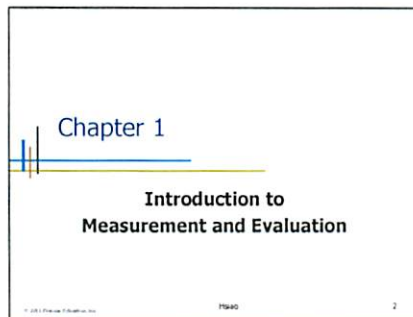
1. An instrument or procedure that measures attributes or properties of an individual is referred to as a(n):
  - a. test.
  - b. measurement.
  - c. evaluation.
  - d. assessment.
  - e. needs assessment
2. The precision, consistency, or repeatability of questions or tests specifically refers to:
  - a. validity.
  - b. objectivity.
  - c. reliability.
  - d. accountability.
  - e. all of the above.
3. Measurement:
  - a. precedes testing.
  - b. immediately follows testing.
  - c. occurs simultaneously with testing.
  - d. takes place when scores are obtained.
  - e. is synonymous with testing.
4. The word or phrase which best describes the relationship between test, measurement, and evaluation is:

- a. synonymous.
  - b. unrelated.
  - c. somewhat related.
  - d. very much interrelated.
  - e. qualitative terms.
5. What statement best describes the view the American public is taking regarding education?
- a. Education should be viewed without question.
  - b. Education is something that needs to be questioned and scrutinized.
  - c. Education is serving all students equally and successfully.
  - d. Existing programs seldom need review.
  - e. Education continues to be excellent for K-12 students.
6. Which of the following provides performance indicators, assessment tasks, and rubrics for measuring student achievement?
- a. *National Standards for Physical Education*
  - b. *Outcomes of Quality Physical Education Programs*
  - c. *PE Metrics*
  - d. *Moving into the Future: National Physical Education Standards*
  - e. *AAHPERD Physical Best Program*
7. Recent scientific and technological advances:
- a. have done little to aid measurement of human performance.
  - b. has done a great deal to aid measurement of human performance.
  - c. have not influenced in any way measurement of human performance.
  - d. have had a greater impact on influencing the affective domain.
  - e. have increased the scrutiny of the cognitive domain.
8. Which of the following is not a part of the *Healthy People 2010* initiative?
- a. Reforming health insurance
  - b. Preventing disability
  - c. Promoting health
  - d. Decreasing premature death
  - e. All are a part of the *Healthy People 2010* initiative.
9. Promotion of physical activity should focus on:
- a. improving scores on fitness tests in schools.
  - b. encouraging more children to participate in organized youth sports.
  - c. designing programs to promote activity with both a short-term and long-term focus.
  - d. on programs designed for adults aged 20-40 years.
- Answer: c
10. *Moving into the Future: National Physical Education Standards* is a document published by the:
- a. American College of Sports Medicine.
  - b. National Association of Sport and Physical Education.
  - c. Presidential Commission on Physical Education.
  - d. American Society of Physical Educators.
  - e. Physical Education Teacher Educators

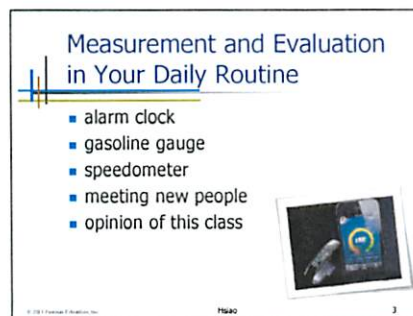
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Slide 2



Slide 3



Slide 4

### Professional Measurement and Evaluation

- protocols for assessing injuries and charting rehabilitation
- statistical information that coaches collect in athletics
- fitness testing in schools
- assessing a client's fitness level and evaluating progress

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### Types of Assessment

- Quantitative
  - time in one mile run
  - score on basketball spot shooting test
  - grade on weight training exam
- Qualitative
  - "excellent" ranking on throwing form
  - checklist on golf swing
  - score on gymnastics routine

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### Test, Measurement, and Evaluation


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


## Uses of Measurement and Evaluation

- **Diagnosis**
  - By diagnosing weaknesses, the instructor is able to concentrate on these areas to help the individual or group learn.
    - Ex, athletic trainers diagnose injuries in order to prescribe treatment.

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## Uses of Measurement and Evaluation (Con.)

- **Classification**
  - From an educational standpoint, it is sometime advantageous to divide students into either homogeneous or heterogeneous groups based on some attribute.

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## Uses of Measurement and Evaluation (Con.)

- **Achievement**
  - Refer to the final ability level at a designated point in time, often coinciding with the end of a unit in school settings.
  - The measurement of achievement is normally made relative to some standard or criterion.

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### Uses of Measurement and Evaluation (Con.)

- Improvement
  - The difference in performance between an initial point and a later point in time.
  - The best reason to measure improvement is to provide encouragement and information on performance to less skilled members of a group.

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### Uses of Measurement and Evaluation (Con.)

- Motivation
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  - Ex, if skill tests are given at the beginning and end of a unit, many students will be motivated to try to improve their performance scores.

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### Uses of Measurement and Evaluation (con.)

- program evaluation
  - evaluating units of instruction
  - evaluating overall curriculum
  - instructional effectiveness
- public relations
  - Advocating for your program with effective public relations strategies is a necessity.

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### Uses of Measurement and Evaluation (con.)

- Prediction
  - It would be desirable to predict future happenings or results from current or past data.
    - Ex, professional athletic teams do extensive testing to prepare for draft day in order to evaluate the potential future success of the player selected.

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### Current Trends

- public health initiatives
- promotion of physical activity
- problems with obesity
- evaluation standards for school programs
- alternative assessments
- rapid technological advances

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### Healthy People 2010 Goals

- Increase quality and years of healthy life
- Eliminate health disparities
- Focus areas:
  - Access to quality health services
  - Diabetes
  - Food safety.....

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### Evaluation Standards for School-based Programs

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  - Which included 20 outcome statements culminating in a definition of a physically educated person. This was one of the first efforts at developing national evaluation standards. (Box 1.4)

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### National Standards for Physical Education

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## Summary

- Tests are tools or instruments of measurement;
- Measurement is a major step in evaluation;
- Evaluation is an all-encompassing process that makes qualitative decisions based on data generated from tests and measurements.

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## Questions?

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