

ITLS 4160 Measuring Learning and Performance Syllabus

Course Description

ITLS 4160—Measuring Learning and Performance^[1]

The goals of this course are (1) to introduce conceptual and practical issues in measuring learning and performance and (2) to train students to design educational evaluations and analyze the data they generate. Of particular emphasis will be the application of gap analysis to diagnose the causes of underperformance in varied organizations.

^[1] This syllabus may be revised at the discretion of the instructor to best accommodate the needs of the class.

Course Objectives

By the end of this course, you will be able to:

1. Identify, accurately characterize, and evaluate assessment and evaluation strategies.
2. Weigh the strengths and weaknesses of existing strategies for assessing learning and performance.
3. Develop an evaluation proposal intended to assess learning outcomes within a hypothetical organization.

Instructor

David F. Feldon, Ph.D.

Office: CEHS 213

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Office Hrs: By appointment

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Course Resources

Required text:

Clark, R.E., & Estes, F. (2008). *Turning research into results: A guide to selecting the right performance solutions*. Charlotte, NC: Information Age Publishing, Inc.

All other readings available through hyperlinks from this syllabus or from within the modules.

Course Expectations

Expectations of Students:

- Actively engage with the course material and find ways to make it relevant to your professional and academic needs and goals
- Challenge statements that are confusing or with which you disagree
- Engage in all dialogue with thoughtfulness, openness, and respect

- Work to develop your writing skills throughout the course

Expectations of Instructor:

- Available to address questions and concerns
- Will respond to messages and emails within 48 hours
- Provide clear explanations of salient principles and theories
- Conduct an intellectually challenging and rigorous course

Course Requirements

By the closing date of each module (~10 days per module), each student will:

1. Complete all readings and watch/listen to all videos/podcasts.
2. Post an answer to the Discussion Question(s) and post responses to at least 2 other students.
3. Perform any assigned exercises and submit any listed assignments.

Evaluation Methods and Criteria

Discussion Participation. You must reply to the discussion prompt(s) included with each module and reply to at least two other students' posts. Credit/no credit by week. 30% of course grade.

Evaluation Report Critique. Identify an evaluation report for an organization or program of interest to you. Summarize its findings, and critique the approach(es) used. Identify the strengths and weaknesses, then make recommendations for a new report. Rubric provided in [Module 7](#). Graded. 30% of course grade.

Final Paper. A written fictional case study for an evaluation of some learning or training effort within an organization (real or hypothetical). The proposal must include a systematic approach and specific measurement strategies that are explicitly justified in the paper. An expanded description of this assignment is available [here](#) and a detailed rubric is available [here](#). A template to assist in structuring the paper is [here](#). Graded. 40% of course grade.

Papers more than one week late will not be accepted unless a student has experienced an extreme emergency (contact the instructor). A paper received from one day to seven days late will receive a one full letter grade reduction. Please note that I only give incomplete grades in rare and exceptional cases.

Any case involving academic dishonesty or any other violation of the Honor Code will be referred to the University for further action.

Grade Scheme

The following grading standards will be used in this class:

Grade	Range
A	100 % to 93.0%
A-	< 93.0 % to 90.0%
B+	< 90.0 % to 87.0%
B	< 87.0 % to 83.0%
B-	< 83.0 % to 80.0%
C+	< 80.0 % to 77.0%
C	< 77.0 % to 73.0%
C-	< 73.0 % to 70.0%
D+	< 70.0 % to 67.0%
D	< 67.0 % to 60.0%
F	< 59.0 % to 0.0%

Course Schedule

Date	Topic	Assignment Due
1/19	Introduction -course overview -definitions of evaluation and assessment -looking for “active ingredients”	Discussion post: Introduce yourself to your classmates and the instructor, explaining your specific interests in the course and your long-term employment goals. Also describe the organization that you will use for your exercises during the course. Video Lecture
1/25	Module 1: Perspectives on Learning, Achievement, and Performance -role of theory in designing assessments -role of culture and context -biases	Bandalos (2018, pp. 500-516) Feldon (2012) Okagaki (2001) https://www.wbur.org/onpoint/2019/09/09/achievement-gap-opportunity-education-schools-students-teachers Video Lecture

Date	Topic	Assignment Due
2/4	Module 2: Performance Goals -structure and qualities of effective goals	Clark & Estes, Chs. 1-2 Anderson et al. (2001) , Ch. 2 (pp. 12-23) SMART Goals article and video (https://www.mindtools.com/pages/article/newHTE_87.htm)
2/14	Module 3: What to Measure? -knowledge types -Bloom's revised taxonomy -Logic models	Anderson et al. (2001) , Chs. 1, 3-5 (pp. 1-11, 23-92) Clark & Estes, Ch. 3 Video Lecture
2/24	Module 4: Gap Analysis -knowledge gaps -motivation -culture/context	Clark & Estes, Chs. 4-6 Gallimore & Goldenberg (2001) Video Lecture
3/5	Module 5: How to Measure? -data types -normative vs. criterion assessment -assessment items -rubrics	Bandalos (2018, pp. 1-24, 63-84) Rubric Development Video
3/15	Module 6: Technical Properties of Measurement -reliability -validity -classical test theory	Bandalos (2018, pp. 155-171) Royse, Thyer, & Padgett (2016, pp. 301-330) Internal consistency: https://youtu.be/vnP4KTJHYRs Test-retest reliability: https://youtu.be/sc7PSBm8HWw Validity video Classical Test Theory: https://youtu.be/iDiW7p_ytM

Date	Topic	Assignment Due
3/25	Module 7: 4-Level Evaluation Model	Clark & Estes, Ch. 7 Kirkpatrick (1996) https://youtu.be/7ThFfgocqrc
		Evaluation Critique Due by 4/8
4/9	Module 8: Practicing Gap Analysis	Clark & Estes, Chs. 8-10 Video Lecture
4/30	Integrated Evaluation Paper Due	Submit paper and review/comment upon two others.

References

- Anderson, L., et al. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. San Francisco, CA: Longman.
- Bandalos, D. L. (2018). *Measurement theory and applications for the social sciences*. New York: The Guilford Press.
- Feldon, D. F. (2012). Validity of learning. In N. Seel (Ed.), *Encyclopedia of the Sciences of Learning* (pp. 3381-3383). New York: Springer.
- Kirkpatrick, D. L. (1996). Great ideas revisited. *Training and Development Journal*, 50, 54-59.
- Mislevy, R., Steinberg, L., Almond, R., & Lukas, J. (2006). Concepts, terminology, and basic models of evidence-centered design. In D. Williamson, R. Mislevy, & I. Bejar (Eds.), *Automated scoring of complex tasks in computer-based testing* (pp. 15-48). Mahwah, NJ: Lawrence Erlbaum Associates.
- Royse, D., Thyer, B., & Padgett, D. (2016). Measurement tools and strategies. In *Program evaluation: An introduction to an evidence-based approach*. Boston: Cengage Learning.
- Shute, V., & Moore, G. (2017). Consistency and validity in game-based stealth assessment. In H. Jiao & R. Lissitz (Eds.), *Technology enhanced innovative assessment: Development, modeling, and scoring from an interdisciplinary perspective* (pp. 31-51). Charlotte, NC: Information Age Publishing.

Library Services

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at libguides.usu.edu/rc.

Classroom Civility

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read [Student Code Article V Section V-3](#) for more information.

University Policies & Procedures

COVID-19 Classroom Protocols

In order to continue to provide a high standard of instruction at USU, and to limit the spread of COVID-19 during the pandemic, students are asked to follow certain classroom protocols. These protocols are in place not only for your safety but also the safety of the rest of the campus community. You will be asked to clean your desk area at the start of each class, sit in designated seats, wear face coverings, and follow dismissal instructions. There may be individual medical circumstances that prevent some students from using face coverings. These circumstances will be rare, but if they do exist, we ask that everyone be respectful. It is imperative that we each do our part so that on-campus instruction can continue.

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. [Faculty Code Policy #403](#) further defines academic freedom and professional responsibilities.

Academic Integrity – "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

Academic Dishonesty

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined in the University's Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating:** using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
 - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually;”
 - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
 - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
 - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
 - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
 - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.
- **Falsification:** altering or fabricating any information or citation in an academic exercise or activity.
- **Plagiarism:** representing, by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to: [ARTICLE VI. University Regulations Regarding Academic Integrity](#)

Sexual Harassment/Title IX

Utah State University is committed to creating and maintaining an environment free from acts of sexual misconduct and discrimination and to fostering respect and dignity for all members of the USU community. Title IX and [USU Policy 339](#) address sexual harassment in the workplace and academic setting.

The university responds promptly upon learning of any form of possible discrimination or sexual misconduct. Any individual may contact USU’s [Office of Equity](#) for available options and resources or clarification. The university has established a complaint procedure to handle all types of discrimination complaints, including sexual harassment ([USU Policy 305](#)), and has designated the Office of Equity Director/Title IX Coordinator as the official responsible for receiving and investigating complaints of sexual harassment.

Withdrawal Policy and "I" Grade Policy

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of

extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Students with Disabilities

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the [Disability Resource Center \(DRC\)](#) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

Diversity Statement

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: <https://studentaffairs.usu.edu>, (435) 797-1712, studentservices@usu.edu, TSC 220
- Student Legal Services: <https://ususa.usu.edu/student-association/student-advocacy/legal-services>, (435) 797-2912, TSC 326,
- Access and Diversity: <http://accesscenter.usu.edu>, (435) 797-1728, access@usu.edu; TSC 315
- Multicultural Programs: <http://accesscenter.usu.edu/multiculture>, (435) 797-1728, TSC 315
- LGBTQA Programs: <http://accesscenter.usu.edu/lgbtqa>, (435) 797-1728, TSC 3145
- Provost's Office Diversity Resources: <https://www.usu.edu/provost/diversity>, (435) 797-8176

You can learn about your student rights by visiting:

The Code of Policies and Procedures for Students at Utah State University: <https://studentconduct.usu.edu/studentcode>

Grievance Process

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: [Article VII](#).

Full details for USU Academic Policies and Procedures can be found at:

- [Student Conduct](#)
- [Student Code](#)
- [Academic Integrity](#)
- [USU Academic Policies and Procedures](#)
- [Academic Freedom and Professional Responsibility Policy](#)

Emergency Procedures

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.

Mental Health

Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at [Counseling and Psychological Services \(CAPS\)](#).

Students are also encouraged to download the [“SafeUT App”](#) to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.