SYLLABUS: ESLTECH 7278
FORMATIVE EVALUATION OF LEARNING TECHNOLOGIES
AUTUMN 2022

Instructor: Rick Voithofer, Ph.D.
Email address: voithofer.2@osu.edu
Office hours: By appointment only. Please email me to set up a phone call or a Carmen Zoom session.

Course description

We often hear the catchphrase, "Evidence---Based X (e.g., instruction, practices, programs, etc.)" without a clear understanding of the context of the evidence being collected, the methods of collection, the forms of analysis, and the factors influencing the communication of results drawn from the evidence. All these factors fall under the rubric of evaluation.

The purpose of this course is to study and apply principles and procedures to plan, design, and conduct effective evaluations of learning technologies in different educational settings. This can include both macro (program) and micro (class) levels including assessing the rollout of a new learning technology in an organization (e.g., school, university, businesses) or assessing the use of technology in new ways to support a lesson or unit. In this course you will formulate evaluative questions, develop evaluation plans and methods, critique and create evaluative instruments, conduct evaluation try-outs, analyze data, and report findings/recommendations.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Distinguish evaluation from research
- Define basic concepts and terminology associated with evaluation
- Analyze and critique evaluative instruments
- Compare and contrast different types of evaluation
- Explain the basic purposes and uses of evaluation depending on its purposes
- Formulate evaluative questions
- Describe the basic steps on doing evaluation
- Create (design and develop) evaluative instruments
- Use qualitative and quantitative data gathering techniques in an evaluation project
- Distinguish reliability from validity
- Plan usability and user experience studies
- Discuss alternative evaluation approaches
- Discuss politics, ethics, and standards of evaluation
- Gather, analyze, and interpret evaluation data and information

- Report the results of evaluation activities
- Be an active and successful member of a geographically distributed team

Course materials

Recommended books

- Fitzpatrick, J., Sanders, J. & Worthen, B. (2011). *Program Evaluation: Alternative Approaches and Practical Guidelines* (4th ed.). New York: Pearson. --- Please note that this is NOT a required/ mandatory book; PDFs of the required chapters are provided in Carmen. However, if you are interested in a career in evaluation/assessment, this is an important book; you can buy a used copy or even an older edition at Amazon.com for a fair price)
- Frechtling, J., (2010). *The 2010 User-Friendly Handbook for Project Evaluation*. Division of Research and Learning in Formal and Informal Settings, Directorate for Education and Human Resources. Arlington, VA: National Science Foundation. FREE copy at: https://www.purdue.edu/research/docs/pdf/2010NSFuser-friendlyhandbookforprojectevaluation.pdf

Besides the recommended books, discussions are also based on: (1) articles provided by Dr. Voithofer, and (2) free online materials. See the Course Schedule below for readings. Please complete all the readings and online discussions/activities by the indicated date.

Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Support information can be found at: https://ocio.osu.edu/help and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** http://ocio.osu.edu/selfservice
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

Baseline technical skills necessary for online courses

- Basic computer use and troubleshooting
- Web-searching and browsing skills
- Word Processing
- Basic image manipulation skills
- Navigating Carmen

Technology skills necessary for this specific course

- Carmen Zoom text, audio, and video chat (https://osu.zoom.us/j/95633803519?pwd=eFVwUFp1WVVaZ09SNjRNeFpkWW50QT09 . Carmen Zoom help (https://teaching.resources.osu.edu/toolsets/carmenzoom). To test zoom try this test meeting (https://zoom.us/test)
- Use Microsoft One Drive (https://microsoft365.osu.edu)
- Recording a slide presentation with audio narration
- (Preferred, but not mandatory) Recording, (minor) editing, and uploading video

Necessary equipment

- Computer: current Mac (OS X) or PC (Windows 10) with high-speed internet connection. Please make certain that your computer has all recent operating system updates and anti-virus protection software. There are many potential security risks, viruses, malware, and ransomware that can put your data and computer use at risk. A little prevention goes a long way.
- Webcam: built-in or external webcam, fully installed.
- (Optional) USB headset – A USB headset will provide the best experiences both for you and your fellow students. (There are many great options. Here is one suggestion that works on both PCs and Macs: http://go.osu.edu/C4w9).

Assignments & Course Participation

Our weeks will typically start on Monday. Most due dates will be on Sunday at midnight, with a few exceptions where you will interim deadlines during the week.

Project 1: Evaluative Instrument Critique (individual)

This project consists of critiquing an evaluative instrument (paper or electronic-based). The instrument must serve an evaluative purpose and should measure aspects of a learning technologies related training program or event.

Deliverable: Critique Report (25 points). *For more information about this assignment check Carmen.*

Project 2: Evaluation Applied Project (team)

Together with 3-4 other students, you will select an educational product (or prototype) - in print or electronic format- that is suited for formal or informal learning in an academic, K-12 schools, corporate, or non-profit settings.

Deliverables (Please check Carmen for up-to-date deadlines)
- Context Report (20 points)
- Learners' Try-Out Plan (20 points)
- Learners' Try-Out Implementation (20 points)
- Live Class Presentation (20 points)
- Final Report (20 points)

For more information about this assignment check Carmen.

Team Members Evaluation (individual)

At the end of Project 2: Evaluation Applied Project, you are required to submit a review that describes the contributions of both you and your team members to Project 2. *For more information about this assignment check Carmen.*

Project 3: Reflection on Discussion Leader/ Facilitator Experience (individual)

In this project, you are expected to reflect upon what you have learnt in this course, especially on your experience as an online discussion leader/ facilitator (see below under Course Participation) for more details.

Deliverable: Reflection Report (25 points)
For more information about this assignment check Carmen under Assignments.

Course Participation

The online discussions and course activities are your opportunity to reflect on the readings, ask questions, engage in design and development activities, participate in activities, lead conversations and discuss any issues about the course. In this course you are strongly encouraged to express yourself using not only text- based formats, but also contributions in audio, video, and images formats. Because participation, involvement and leadership is particularly important when learning online, the course participation makes up a significant portion of your grade.

Online Discussion Leader/ Facilitator

As part of your participation grade, you are expected to serve as an online discussion leader/ facilitator for *at least* ONE online discussion. As the discussion facilitator, you will need to:

1. Set the agenda for the discussion: the objectives of the discussion, guiding questions, or scenarios for discussion.
2. Clarify Purpose: What is the expected outcome of the discussion.
3. Encourage the participation: Create a trustful atmosphere.
4. Guide the discussion by asking leading questions rather than speaking up for him or herself.
5. Ensure that some participants do not dominate the conversation by inviting less participative elements to jump in the discussion.
6. Keep the discussion focused on the topics related with the readings.
7. Encourage multiple views of the same issue(s).
8. Bring the discussion to an end by summarizing the highlights (short posting).

For more information about course participation check Carmen under Assignments.

Participation expectations

- Please complete assigned readings and activities, contribute to online discussions, and submit assignments on time. Failure to do this will affect your grades.
- Complete projects assigned (individual and team). Participate on the course activities and online discussions using not only text-based contributions, but also audio, video, and images as forms of expression.
- Please be consistent on your participation and inform Dr. Voithofer at Voithofer.2@osu.ed of any circumstances that will prevent you to contribute to the online discussions, activities, and assignments, including the live session at the end of the semester on Carmen zoom. This will be scheduled ahead of time to allow students to make necessary arrangements to attend.

Grades

Assignment or category	Points
Project 1: Evaluative Instrument Critique	25
Project 2: Evaluation Applied Project	100
1. Context Report (20 points) 2. Learners' Try-Out Plan (20 points) 3. Learners' Try-Out Implementation (20 points) 4. Live Class Presentation (20 points) 5. E. Final Report (20 points)	
Team Members Evaluation	10
Project 3: Reflection	25
Course Participation	40
Total	200

Grading scale

Grading scale (%)	Grading scale (points)
93–100%: A	186– 200: A
90–92.9%: A-	180–185.9: A-
87–89.9%: B+	174–179.9: B+
83–86.9%: B	166–173.9: B
80–82.9%: B-	160–165.9: B-
77–79.9%: C+	154–159.9: C+
73–76.9%: C	146–153.9: C
70 –72.9%: C-	140 –145.9: C-
67 –69.9%: D+	134 –139.9: D+
60 –66.9%: D Below 60%: E	120 –133.9D Below 120: E

Academic integrity policy

Policies for this online course:

- **Written assignments**: Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow **APA** style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.
- **Reusing past work**: In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past

research or revisit a topic you've explored in previous courses, please discuss the situation with Dr. Voithofer.

- **Falsifying research or results**: All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- **Collaboration and informal peer-review**: The course includes many opportunities for formal collaboration with your classmates. Collaboration and informal peer-review is encouraged.
- **Group projects**: This course includes group projects, which can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. Dr. Voithofer has attempted to make the guidelines for group work as clear as possible for each activity and assignment, but please let her know if you have any questions.

Ohio State's academic integrity policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."
The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an "excuse" for academic misconduct, so it is recommended that you review the *Code of Student*

Conduct (http://studentconduct.osu.edu) and, specifically, the sections dealing with academic misconduct.

If it is suspected that a student has committed academic misconduct in this course, Dr. Voithofer is obligated by University Rules to report his/her suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.
If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact Dr. Voithofer.
Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Accessibility accommodations for students with disabilities

Mental Health Statement

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 a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Statement on Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Accessibility accommodations for students with disabilities

Requesting accommodations

If you would like to request academic accommodations based on the impact of a disability qualified under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, contact Dr. Voithofer privately as soon as possible to discuss your specific needs. Discussions are confidential.

In addition to contacting Dr. Voithofer, please contact the Student Life Disability Services at 614-292-3307 or ods@osu.edu to register for services and/or to coordinate any accommodations you might need in your courses at The Ohio State University. Go to http://ods.osu.edu for more information.

Our weeks will typically start on Monday. Most due dates will be on Sunday at Midnight, with a few exceptions where you will have interim deadlines before Sunday.

Week	What to do before class	Course activities	To Do
Week 1: 8/23	Prepare your introduction. Think about the question: "What does evaluation mean to you?"	Carmen orientation https://teaching.resources.osu.edu/toolsets/carmencanvas Post Participant's introductions. Participate on online discussion: "What does evaluation mean to you?"	Introductions are due on August 26th and online discussion are due on August 28th at 11:59 pm Eastern Time. Make your initial post before this due date.
Week 2: 8/29	Complete the readings: Fitzpatrick, Sanders & Worthen (2011). Program Evaluation: chapter 1 (*Evaluation's basic purpose, uses, and conceptual distinctions*). Analyze Project 1 Exemplary Projects posted on Carmen.	Evaluation: the big picture (PART 1) Concept and definitions The purposes of evaluation Evaluation types and approaches Roles and activities of Professional Evaluators: American Evaluation Association http://www.eval.org/ Introduction to Project 1 - Project description - Deliverables & deadlines - Evaluation criteria - Submission - Exemplary cases Participate in online discussion	Online Discussion / activities due on 9/4 at 11:59 pm Eastern Time. Make your initial post before this due date.
Week 3: 9/5	Work on Project 1.	Practice on the instrument critique. Sign-up for online discussion leader.	Practice the evaluative instrument critique is due on 9/9 at 11:59 pm Eastern Time. Contribute to Practice Discussion by 9/12th Sign-up for online discussion leader by September 11th at 11:59 pm Eastern Time.

Week 4: 9/12	Complete and submit Project 1. Complete the readings: Fitzpatrick, Sanders & Worthen (2011). Program Evaluation: chapter 1 (*Evaluation's basic purpose, uses, and conceptual distinctions*). RE-READ Kirkpatrick, D. (1998). *Evaluating Training Programs: The Four Levels* (2nd ed). San Francisco: Berrett-Koehler (pages 19-24). Newby (1992). *Training Evaluation Handbook*: chapters 1-2.	Evaluation: the big picture (PART 2) Evaluation: What does it mean? How to define it? It's all about terminology: Needs Assessment, Monitoring, Outcome Studies, Testing, Measurement, and Assessment Participate on online discussion. Introduction to Project 2 Review project description (deliverables, evaluation criteria, deadlines) Intro to APA style http://www.apastyle.org/	Online discussion/activities due on September 18th at 11:59 pm Eastern Time. Make your initial post before this due date. Project 1 is due on **September 18th** at 11:59 pm Eastern Time.
Week 5: 9/19	Kick-off Project 2. Complete the readings: Mathison, S. (2008). What Is the Difference between Evaluation and Research and Why Do We Care? In Nick L. Smith, Paul R. Brandon (Eds), *Fundamental Issues in Evaluation* (pp. 183- 197). New York: Guilford Press. Frechtling, J., et al. (2010). *The 2010 User-Friendly Handbook for Project Evaluation.* (Pages 6-14).	Evaluation *versus* Research. - Differences and similarities - The overlapping (if any) between the two Participate on online discussion. Form Project 2 teams.	Form Project 2 teams by September 25th at 11:59 pm Eastern Time. Complete Online discussion/activities by September 25th at 11:59 pm Eastern Time. Make your initial post before this due date.
Week 6: 9/26	Complete the readings: Lisk, P. & Quartuccio, K. (2011). Managing Group Assignments in the Online Learning Environment. In Theresa Brosche and Michelle Feavel (Eds.), *Successful Online Learning: Managing the Online Learning Environment Efficiently and Effectively* (pp. 127-146). Sudbury, MA: Jones and Bartlett.	Working in geographically distributed teams: - Be a successful team member - Manage your project wisely Participate on online discussion.	Online discussion/activities due on 10/2 at 11:59 pm Eastern Time. Make your initial post before this due date.

Week 7: 10/3	Prepare for consultation with Dr. Voithofer. Complete the readings: Fitzpatrick, Sanders & Worthen (2011). Program Evaluation: chapter 13 (*Identifying and selecting the evaluation questions and criteria*). Frechtling, J., et al. (2010). *The 2010 User-Friendly Handbook for Project Evaluation.* (Pages 75-93).	The evaluative questions. Participate on online discussion. Consultation with Dr. Voithofer during the week via Carmen Zoom (this consultation is *optional* based on the teams' needs).	Online discussion/activities due on 10/9 at 11:59 pm Eastern Time. Make your initial post before this due date.
Week 8: 10/11	Complete and submit Project 2 Context Report. Complete the readings: Frechtling, J., et al. (2010). *The 2010 User-Friendly Handbook for Project Evaluation.* (Pages 15-37).	Steps in doing an evaluation. Learners' Try-outs. Participate on online discussion.	Project 2 Context Report is due on **10/16** at 11:59 pm Eastern Time. Online discussion/activities due on October 30th at 11:59 pm Eastern Time. Make your initial post before this due date.
Week 9: 10/17	Complete the readings: Frechtling, J., et al. (2010). *The 2010 User-Friendly Handbook for Project Evaluation.* (Pages 58-73). Fitzpatrick, Sanders & Worthen (2011): Program Evaluation: chapter 16 (*Collecting evaluative information: Common Sources and Methods for Collecting Information)* Newby (1992). *Training Evaluation Handbook*: chapter 7 (*Interview*).	Data collection Methods. Survey design and development Interviews as a method to gather data. Advantages and disadvantages of different methods of data collection depending on the evaluative questions you want to answer. Participate on online discussion. Dr. Voithofer collects course feedback from students: Mid-term course evaluation.	Online discussion/activities due on 10/23 at 11:59 pm Eastern Time. Make your initial post before this due date.

Week 10: 10/24	Prepare for consultation with Dr. Voithofer. Complete the readings: Drost, E. A. (2011). Validity and Reliability in Social Science Research. *Education Research and Perspectives, 38*(1), 105-123.	Validity and reliability. Participate on online discussion. Consultation with Dr. Voithofer on **October 23rd** between 5-7 pm US Eastern Time via Carmen Zoom (this consultation is *optional* based on the teams' needs).	Online discussion/activities due on 10/30 at 11:59 pm Eastern Time. Make your initial post before this due date.
Week 11: 10/31	Complete and submit Project 2 Learners' Try-Out Plan. Complete the readings: Fitzpatrick, Sanders & Worthen (2011). Program Evaluation: chapter 16 (*Collecting evaluative information: Analysis of Data and Interpretation of Findings)* Fitzpatrick, Sanders & Worthen (2011): chapter 17 (*Reporting Evaluation Results: Maximizing Use and Understanding*)	Analysis of data and interpretation of findings. Reporting evaluative results. Participate on online discussion. Introduction to Project 3 - Project description - Deliverables & deadline - Evaluation criteria - Submission	Project 2 Leaners' Try-Out Plan is due on 11/6at 11:59 pm Eastern Time. Online discussion/activities due on 11/6 at 11:59 pm Eastern Time. Learners' Try-out Implementation may take place anytime between **Nov.6th to Nov.26th**, depending on teams' availability.
Week 12: 11/7	Complete the readings: - Fitzpatrick, Sanders & Worthen (2011). Program Evaluation: chapter 10 (*A Comparative Analysis of Approaches*)	Alternative evaluation approaches. Participate on online discussion.	Online discussion due on November 13th at 11:59 pm Eastern Time.

Week 13: 11/14	Complete the readings: Bhola, H (1990). Politics of evaluation, ethics, and standards. In H. Bhola, Evaluating *Literacy for Development Projects, Programs and Campaigns* (pp.273-279). Paris: Unesco Institute of Education. Fitzpatrick, Sanders & Worthen (2011). Program Evaluation: chapter 3 (*Political, Interpersonal, and Ethical Issues in Evaluation).*	Politics, ethics, and standards of evaluation. Participate on online discussion.	Online discussion/activities are due on November 27th at 11:59 pm Eastern Time.
Week 14: 11/21	THANKSGIVING BREAK Thanksgiving break starts 11/24	Use Thanksgiving break to work on Learners Tryout Implementation if not completed yet.	Learners' Try-Out Implementation 11/27
Week 15: 11/28	Prepare for Project 2 Live Class Presentation (mandatory) Finalize Project 2 Final Report.	December 3: **Test** session with Carmen Zoom from 5 to 6 pm Eastern Time. To prevent spending too much time troubleshooting, please check Carmen Zoom equipment requirements & set up information	Project 2 Final Report is due on **December 7th** at 11:59 pm Eastern Time.
Week 16: 12/5		Course wrap-up. Final Presentations will be scheduled this week.	Team Members Evaluation is due on **December 10** at 11:59 pm Eastern Time. Last day to submit Project 3 is **December 11th** at 11:59 pm Eastern Time.