

# LDE - Learning Design and Evaluation

## **LDE 415 Assessment (3 Credit Hours)**

Welcome to the world of measuring what matters (and sometimes what doesn't). This course dives into the art and science of assessment—where numbers, reliability, and validity join forces to help us make smarter decisions in education and psychology. We'll untangle the mysteries of teacher-made quizzes, standardized tests, and research-based tools, and explore how to use them wisely with different learners. Think of it as your toolkit for turning raw test scores into meaningful insights—without losing your sense of humor along the way.

## **LDE 416 Human Development & Learning (3 Credit Hours)**

In this course, we'll explore how humans grow, develop, and learn across the lifespan. We'll explore the major theories and current research on human development, encompassing cognitive and emotional growth, identity, motivation, and moral reasoning. You'll gain insight into how people become who they are as learners and how developmental change shapes learning, teaching, and relationships in diverse educational contexts. We'll also question what 'development' really means across cultural, social, and digital environments, especially where traditional theories fall short of representing all learners.

## **LDE 419 Project Management & Consulting (3 Credit Hours)**

This project-based course is designed to develop and enhance the ability of designers to work in an all-collaborative practice space to improve performance. The focus is on consulting and project management skills rather than any specific content. Designers will have the opportunity to complete an individual consulting project with the support from fellow designers and the instructor.

## **LDE 421 Instructional Technology (3 Credit Hours)**

This course focuses on the application of evidence-based instructional methods to the design, development, and evaluation of synchronous and asynchronous multimedia learning. The course presents several research-based guidelines for e-learning to include 1) an explanation of the guideline, 2) the evidence that supports the guideline, 3) the psychology behind the guideline, and 4) examples of guideline violations and applications. The course also focuses on design and development decisions proven to influence learning outcomes.

## **LDE 515 Assessment (3 Credit Hours)**

Welcome to the world of measuring what matters (and sometimes what doesn't). This course dives into the art and science of assessment—where numbers, reliability, and validity join forces to help us make smarter decisions in education and psychology. We'll untangle the mysteries of teacher-made quizzes, standardized tests, and research-based tools, and explore how to use them wisely with different learners. Think of it as your toolkit for turning raw test scores into meaningful insights—without losing your sense of humor along the way.

## **LDE 516 Human Development & Learning (3 Credit Hours)**

In this course, we'll explore how humans grow, develop, and learn across the lifespan. We'll explore the major theories and current research on human development, encompassing cognitive and emotional growth, identity, motivation, and moral reasoning. You'll gain insight into how people become who they are as learners and how developmental change shapes learning, teaching, and relationships in diverse educational contexts. We'll also question what 'development' really means across cultural, social, and digital environments, especially where traditional theories fall short of representing all learners.

## **LDE 519 Project Management & Consulting (3 Credit Hours)**

This project-based course is designed to develop and enhance the ability of designers to work in an all-collaborative practice space to improve performance. The focus is on consulting and project management skills rather than any specific content. Designers will have the opportunity to complete an individual consulting project with the support from fellow designers and the instructor.

## **LDE 521 Instructional Technology (3 Credit Hours)**

This course focuses on the application of evidence-based instructional methods to the design, development, and evaluation of synchronous and asynchronous multimedia learning. The course presents several research-based guidelines for e-learning to include 1) an explanation of the guideline, 2) the evidence that supports the guideline, 3) the psychology behind the guideline, and 4) examples of guideline violations and applications. The course also focuses on design and development decisions proven to influence learning outcomes. It is recommended that a student completes LDE 610 prior to taking this course.

## **LDE 610 Instructional Design Principles and Practice (3 Credit Hours)**

This course introduces foundational principles and practices in instructional design. Students will explore instructional design models, analyze learner needs, and apply systematic design processes to create effective and inclusive learning experiences. Emphasis is placed on integrating technology, aligning learning objectives with assessment, and addressing diverse learner contexts. Through real-world case studies and design challenges, students will gain practical experience in designing instruction for various learning environments.

## **LDE 611 How People Learn (3 Credit Hours)**

Welcome to the science of how people learn, think, and stay motivated. In this course, we'll explore the foundational theories of educational psychology and how they shape learning and teaching in today's diverse contexts. You'll gain insight into the 'why' behind student behavior and achievement. We'll also question how these theories apply across cultural and social contexts—where traditional models sometimes miss the mark. Think of this course as your roadmap for understanding the learner's mind, the best way to learn, and evaluating what truly supports learning.

## **LDE 612 Basic Research Principles (3 Credit Hours)**

This course introduces the principles, language, and logic of educational research. Students will learn how to read studies critically, understand how evidence is generated, and apply research concepts to real educational questions. We'll explore both quantitative and qualitative traditions, focusing on how researchers design studies, collect and interpret data, and draw trustworthy conclusions. Rather than memorizing formulas, this course emphasizes understanding the research process. Including how to ask good questions, choose appropriate methods, and evaluate evidence with a critical eye. Other topics include sampling, validity of measures, threats to internal and external validity, and simple statistics.

## **LDE 613 Evaluating Learning and Programs (3 Credit Hours)**

This course equips instructional designers, educational psychologists, and program evaluators with the tools to plan and conduct meaningful evaluations of learning environments and initiatives. This course gives you the tools to find out how, why, and for whom. You'll explore foundational evaluation models (logic models, theory-driven, utilization-focused), strategies for collecting and analyzing meaningful data, and ways to present findings that inform decisions rather than gather dust on a shelf. Along the way, you'll practice balancing rigor with real-world constraints, spotting common pitfalls (like measuring what's easy instead of what matters), and framing results in ways stakeholders can understand — and act on. Case studies and applied projects keep the focus practical, with just enough theory to make you dangerous (in a good way).

## **LDE 614 Statistics for Design and Evaluation (3 Credit Hours)**

This course provides a practical foundation in statistical reasoning for graduate students in instructional design, educational psychology, and program evaluation. Using authentic datasets from learning environments and program evaluations, students learn to summarize data, select and run appropriate statistical tests, and interpret results to guide design decisions, psychological research, and program improvement. Topics include descriptive statistics, probability, sampling, hypothesis testing, correlation, regression, and interpreting real-world datasets. Along the way, we demystify concepts such as p-values, confidence intervals, and effect sizes — replacing fear with understanding (and only occasional mild discomfort). The course emphasizes applied examples, critical evaluation of statistical claims, and ethical use of data. By the end, students will be able to summarize data clearly, select and run appropriate statistical tests, and interpret results with accuracy — and even enjoy the process.

**LDE 617 Motivation and Metacognition (3 Credit Hours)**

Interested in the why of learner engagement? You're in the right place! We'll also explore how they manage their own learning once they do. This course dives into the motivational and metacognitive processes that drive persistence, achievement, and self-regulation. We'll unpack how theories such as Expectancy-Value Theory (also Situated Expectancy-Value Theory), Self-Determination Theory, and Social Cognitive Theory explain what energizes and sustains learning, while metacognitive models reveal how learners monitor, control, and adapt their thinking. You'll explore the dynamic relationship between motivation and metacognition; how beliefs, goals, and self-awareness fuel performance. Together, we'll challenge one-size-fits-all assumptions about 'motivation' and reflect on how culture, identity, and context shape learners' drive to succeed.

**LDE 618 Human Performance Technology (3 Credit Hours)**

This course explores both the principles and practices of human performance technology (HPT), with equal emphasis on both. Students will learn what HPT is, how it's applied in practice, and how and why instructional designers need to know about HPT. Emphasis is given to determining whether problems are best amenable to instructional or noninstructional solutions.

**LDE 620 Advanced Statistics for Learning, Design and Evaluation (3 Credit Hours)**

This course explores advanced regression techniques through the lenses of learning, instructional design, educational psychology, and program evaluation. Students will use data-driven approaches to understand how individuals learn, how instructional environments shape outcomes, and how programs can be evaluated for continuous improvement. Topics include multiple regression, logistic and multilevel models, longitudinal data analysis, model selection, and ethical interpretation of results. Each topic connects statistical modeling to real-world questions in education and design—how to design better learning systems, improve teaching practices, and make evidence-based programmatic decisions. Students will leave the course able to build, interpret, and communicate sophisticated models that reveal meaningful insights about learners and programs alike.

**LDE 630 Capstone for Learning, Design and Evaluation (3 Credit Hours)**

The graduate capstone serves as a culminating, integrative experience for students in the Instructional Design & Technology (IDT), Educational Psychology (EP), and Program Evaluation (PE) concentrations. Students partner with a real-world client—such as a school, nonprofit, corporation, or educational agency—to apply, through all-collaborative practice, the knowledge and skills developed throughout their program. Over two 8-week terms, students will define a project with a client, design and implement an intervention or evaluation plan, and produce a final deliverable such as a fully developed instructional module, applied research report, program evaluation, or evidence-based improvement plan. Although the course is primarily asynchronous, students will meet regularly with the instructor for project check-ins, coaching, and professional mentoring.