UNIVERSITY OF VIRGINIA · SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT
DEPARTMENT OF CURRICULUM, INSTRUCTION, & SPECIAL EDUCATION

NOW ENROLLING

DOCTORAL COURSE · 3 CREDITS

EDIS 8100

Teaching & Learning Analytics

A new PhD course · ***Fall 2026*** | TAUGHT BY **Dr. Hannah Lee** Assistant Professor

COURSE DESCRIPTION

This course offers a comprehensive introduction to learning analytics—a multidisciplinary field that focuses on the measurement, collection, analysis, and reporting of data about learners and their contexts, with the goal of improving teaching and learning. While adding a specific focus on what is actionable and pedagogically meaningful within classroom and learning environments, students will explore both the conceptual foundations and real-world applications of learning analytics through weekly readings, discussions, peer/instructor feedback, hands-on analytics activities, and projects. Students will learn a range of analytic methods and tools, including text-based, multimodal, temporal, and network analysis, as well as game-based learning analytics. **By the end of the course, students will be able to conceptualize and develop a learning analytics research or implementation plan that integrates learning theory, analysis, and practice, tailored to their own educational contexts or research interests.**

LEARNING OBJECTIVES

- → **Examine and apply foundational concepts, skills, and frameworks** related to learning analytics, including responsible, human-centered approaches.
- → **Select, adapt, and critically evaluate a range of learning analytics approaches** (e.g., text-based, multimodal, temporal, network, game-based) and tools to generate actionable insights for improving teaching, learning, and learning environments.
- → **Design and communicate a learning analytics research or implementation plan** that integrates learning theory, data analysis, and practice, tailored to specific educational or research contexts and accounting for ethical, contextual, and practical considerations.
- → **Engage in collaborative learning processes**, including discussions, peer feedback, and iterative project development, to deepen critical understanding and foster a scholarly learning community.

A NOTE FROM THE INSTRUCTOR

No prior experience with learning analytics or programming? You are exactly who I designed this course for. *Your curiosity matters far more than any technical background. If you have ever wondered what data can tell us about teaching and learning, please come join us.*

AT A GLANCE

COURSE	**EDIS 8100**
TERM	**Fall 2026**
FORMAT	In-person, weekly
CREDITS	3
ELIGIBILITY	EHD PhD students or instructor consent
READINGS	Provided via Canvas
EXAMS	N/A — assessment through projects & participation

TOPICS COVERED

- Foundations & theoretical lenses
- Responsible & human-centered LA
- Teacher & student-facing dashboards
- Text-based analytics & NLP
- Multimodal learning analytics
- Self-regulated learning analytics
- Network & temporal analytics
- Collaboration analytics
- Game-based & emotional analytics
- Co-design of LA systems

COURSE STRUCTURE

01 Lectures introducing core analytics concepts
02 Hands-on (group) analytics projects
03 Student-led discussions on weekly readings
04 Occasional guest speakers

Questions? **hannahlee@virginia.edu** · 209 Bavaro Hall

Register on SIS · Course code **EDIS 8100**
Browse: **hooslist.virginia.edu**