



Project Code: Perlman B

APD 1210 RESEARCH PRACTICUM COURSE

PROJECT DESCRIPTIONS 2024-25

FALL/WINTER

Name and Title: Dr. Michal Perlman (Professor)

Lab Website: <https://www.michalperlman.com/>

TITLE OF RESEARCH PROJECT: Investigating the Application of Artificial Intelligence Research and Intervention Tools in Early Years Development: A Scoping Review

NUMBER OF STUDENT PLACES AVAILABLE: Two

PRIMARY MODE OF RESEARCH PLACEMENT PARTICIPATION (circle one option and describe):

IN PERSON

REMOTE (ONLINE)

Y HYBRID/FLEXIBLE

Students are expected to come to OISE for bi-weekly lab meetings or any other internal project meetings if they are in-person. For specific tasks such as abstract/full-text screening or data analysis, student may have the option of working remotely.

OBJECTIVES AND METHODOLOGY:

The goal of this scoping review is to curate and synthesize literature on examining the application of AI for supporting young children's development. Abstract and full-text screening will be conducted. Thematic and content analyses will be conducted to identify the types of AI tools and techniques and their applications in different contexts.

DESCRIPTION OF STUDENT PARTICIPATION:

Student Responsibilities:

- Conduct full-text screening on Covidence
- Conduct data extraction from primary and empirical research articles
- Manage datasets
- Ensuring that the project is moving forward

Expected hours of work per week:

- 8-10 hours from September to April

Skills that will be taught:



- Integration of evidence (i.e., conducting a scoping review)
- Project management
- Full-text screening of research articles
- Data management and cleaning in Excel
- Data extraction from primary and empirical research articles
- Synthesis of results that can involve qualitative or quantitative data analysis depending on what topic the student is working on
- Evaluating quality of evidence

DESCRIPTION OF PREFERRED SKILLS/BACKGROUND (OPTIONAL):

Mandatory skills/qualities:

- Attention to detail
- Ability to collaborate with peers and lab members
- Eager to learn more about conducting research

Optional skills that are preferred:

- Content knowledge in early development
- Content knowledge in artificial intelligence
- Proficiency in Microsoft excel, powerpoint, and word
- Previous experience and knowledge of scoping review is an asset
- Previous experience and knowledge in any programming language for data analysis (e.g., R, Python, SPSS, etc.) is an asset

DAY AND TIMES OF LAB MEETINGS:

Lab meetings are usually in-person, happening bi-weekly in the morning (exact dates TBD). There are also project meetings that happen internally between lab students who are working collaboratively on projects (that could happen either in-person or online). The APD1210 students are expected to attend to both the general lab meeting and the internal meetings for the project(s) that they are a part of.