

SIGCSE Tutorial Agenda

Integrating Data Science with Non-CS Disciplines: A Tutorial on Developing Non-Traditional Pathways

3:30 - 4:30: Introduction to Process Oriented Guided Inquiry Learning (POGIL) and the Dataset	
3:30 - 3:40 pm	Welcome and Introductions Tutorial Slides: https://bit.ly/SIGCSE_2025_Tutorial_406_Presentation
3:40 - 3:50 pm	Overview of the Data Science Certificate Program
3:50 - 4:00 pm	Program Goals and Research Questions
4:00 - 4:10 pm	Introduction to POGIL
4:10 - 4:25 pm	Introduction to Social Justice Dataset (County Health Rankings 2024 Data): CHR 2024 Data (Subset): https://bit.ly/CHR_2024_Data_Subset CHR 2024 Data Dictionary (Subset): https://bit.ly/CHR_2024_Data_Subset_Dictionary CHR 2024 Data Provenance: https://bit.ly/CHR_2024_Data_Provenance
4:25 - 4:30 pm	Q&A and Discussion
4:30 - 5:30: Using No-Code Tools to Explore a Social Justice Dataset	
4:30 - 5:00 pm	Introduction to CODAP & Exploring the Dataset with CODAP Google Doc (Copy): https://bit.ly/CODAP_CHR_2024_Data
5:00 - 5:20 pm	Introduction to KNIME Google Doc (Copy): https://bit.ly/KNIME_CHR_2024_Data
5:20 - 5:30 pm	Q&A and Transition
5:30 - 6:30: Exploring the Same Dataset Using Python and Investigating ML Algorithms	

5:30 - 5:55 pm	Exploring Dataset Using Python Python Notebook: https://bit.ly/Python_Visualizations_CHR_2024_Data
5:55 - 6:20 pm	Investigating ML Algorithms Python Notebook: https://bit.ly/Python_ML_CHR_2024_Data
6:20 - 6:30 pm	Wrap-Up and Q&A
Post-Tutorial Reflectio: TBA	
END OF TUTORIAL	