

Final project for ERT474/574

UPDATE ON Nov 12 2025, YIFAN CHENG

In this final project, you are expected to form a group of 2 to 3 members. Each group will conduct a hydrologic modeling study for a basin of selection.

Overall procedures

1. Week 11: Finalize the selection of targeted river basin.
2. Week 12-13: Perform the hydrologic modeling studies using the data and configuration provided by the instructor
3. Week 14 (Monday, Nov 24): Progress update: hydrologic model results and evaluation against USGS observations
4. Week 16 (Monday, Dec 8): Final oral presentation (baseline model performance, analysis of the potential errors, sensitivity analysis for one parameter, and final thoughts)
5. Final report due: Dec 15 (Monday)

Hydrologic modeling setup and evaluation

Instructions for the setup and configuration of VIC and mizuRoute will be provided in [CourseMaterials25/final_project](#).

Each group are expected to run VIC and mizuRoute from 2011 to 2024. I will leave it up to you whether you would like to perform spin-up of the model. Bonus credits will be assigned to groups if they perform a decent spin-up. For a proper spin-up, please check [week 10 lab](#).

Progress update on Monday (Week 14)

Each group are expected to finish running the VIC and mizuRoute model by now.

Each group will provide a 5-minute presentation discussing the setup of the modeling and model performance against the USGS observations.