Jordan Sandstone project

What do you want them to do?

- Measure a detailed section and compile it using Adobe Illustrator.
- Interpret the section in terms of grain size and bedding style alone
- Add in sedimentary structures and their interpretation
    - HCS
    - Dune x-strat
    - Ripples
    - Tidal bedforms
    - Bar forms
    - Gutter casts
    - Bioturbation
- Correlate two or more sections; interpret lateral variability
- Integrate 1-3 articles into write-up
- Carbonate cycles and carbonate sedimentology of the St. Lawrence Fm. and the Oneonta Fm.?

What content needs to be covered?

- Carbonate petrography
- Cyclic sedimentation?
- Bedforms and bedform phase diagrams
- Oscillatory bedforms
- Sedimentary structures and their interpretation
    - HCS
    - Dune x-strat
    - Ripples
    - Tidal bedforms
    - Bar forms
    - Gutter casts
- Walther's law
- Tidal systems
- Shelf systems
- Bioturbation and secondary structures
- How to measure a section

Activities to use to work through content:

St Anthony falls flume: sed structures

phase diagram: they derive it

- Carbonate petrography

    - thin section in pairs, like 1st lab
- Cyclic sedimentation?
    - Goldhammer's carb cycles correlation activity
- Bedforms and bedform phase diagrams
    - Deriving bedform phase diagram
- Oscillatory bedforms
- Sedimentary structures and their interpretation
    - Gallery walk with sed structures
    - HCS
        - Classic article on HCS or something from Arnott?
    - Dune x-strat
    - Ripples
    - Tidal bedforms
        - Read JSR article on the Homer outcrop by Carleton student?
    - Bar forms
    - Gutter casts
- Walther's law
- Tidal systems
- Shelf systems
- Bioturbation and secondary structures
- How to measure a section