Setting the Scope for M.S. Research Projects

Ananthan Aiyyer & Josh Galster

Building on previous presentations by Andrew Goodliffe (2012) and Sarah Sarah Penniston-Dorland (2014)

Session outline

- Your goals
- Student's goals/needs
- MS considerations
- External constraints
- Personal experiences
- Your project

What makes a successful MS project?

- Thesis defense
- Technical proficiency/demonstration of skills
  - Writing, critical thinking, project completion
- Answering a specific question
  - e.g., Flood synchronicity in a watershed
- Timeliness: need to get it done
- Conference presentation, maybe publication
- Furthering your research agenda

Your goals & student goals

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<tr>
<th>Your goals</th>
<th>Students' goals</th>
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Your goals

- What are the needs of your research program?
- How can an M.S. project feed into other aspects of your research program? Pilot data?
- Can you adapt a larger-scale project into a smaller M.S. project? Can you expand a smaller project into an M.S. project?
- How many other students do you have? Where/how will your M.S. students fit in?

Student’s goals/needs

- What are the student's goals after completing the master’s (why are they doing this)?
- What are the student's skills, interests, and abilities?
- Should a master’s project be published?
- What are your overall learning outcomes for an M.S. student?
- How much time can your student devote to this?
- Academic background
MS Considerations
- Projects can vary widely
- Technical proficiency/demonstration of skills vs. furthering science
- Writing skills and commitment
- Student's other commitments
- Scale of theses in your department

Design your own M.S project
- Goals
- Funding?
- Amount of time? Summer required?
- Logistics: Travel? Equipment? Lab?
- Previous skills required?
- Other?

Personal experiences
- My experiences
  - Have a specific question for student to answer
  - Manageable expectations
  - Regular meetings (ideally weekly)
  - Periodic meetings with committee also important
  - Clear expectations from you and your student
    - For example, when will drafts be returned?
  - Timelines and regular updates