Master’s Project Kick-off
Class of 2018

Casey Hankey, Group Project Coordinator
April 3, 2017
Information Sources

• Group Project Guidelines
  • Internal Services>Academic and Student Information>MESM GROUP PROJECTS and Eco-E PROJECTS

• Master’s Project Public Presentations
  • Friday, April 21, 1:00-6:30 pm

• Past Reports, Briefs, and Posters
  • GP: http://bren.ucsb.edu/research/gp_past.html
Registration & Grading

• Register with your faculty advisor
  • Spring 2017: ESM 401A/402A (4 units)
  • Fall 2017: ESM 401B/402B (4 units) (IP grade)
  • Winter 2018: ESM 401C/402C (4 units) (grade applies to F17)
  • Spring 2018: ESM 401D/402D (2 units)

• Spend 10–12 hours/week on group project.
• Try to balance workload across quarters.
• A grade of B or better is required in all of ESM 401/402
Evaluations

Extremely important that every group member participates and provides thorough and informative feedback

• Peer & Self Evaluations
  • Completed at end of each quarter
  • Submit to faculty advisor & Group Project Coordinator

• Faculty Advisor Evaluations
  • Spring 2018: Submit to Group Project Coordinator
Project Management

• Group Project member roles:
  • Project manager (PM)
  • Financial manager (FM)
  • Data manager (DM)
  • Outreach manager (OM)
  • Editor (E)
  • Other? E.g. Internship coordinator (IC)

• Create a group alias

• By April 7: Report roles and alias to Group Project Coordinator Casey Hankey

• Attend relevant workshops
Workshops

• **Client Relations** (Dave Parker)
  • Tues, Apr 4 at 11:30 am – 12:30 pm

• **Data management & computing** (Compute Team)
  • required for DM & OM, date TBD

• **Research techniques** (Kristen LaBonte)
  • required for DM, recommended for all, date TBD

• **Project management** (**2nd** year MESM PMs)
  • Required for PM, 11:30 am – 12:30 pm, date TBD

• **Financial management** (Amanda Maffett)
  • required for FM, schedule individual meeting

• **Web design panel** (Lisa Leombruni, Casey Hankey)
  • Fri, Apr 28 at 1:00-3:00 pm (1424)
  • required for OM, recommended for DM
Website

• Each group must create (by Jun 16) and maintain a website for the duration of your project.

• Minimum content:
  • Name and emails of all group members
  • Group email address
  • Names and email of advisor(s)
  • Description of your project
  • http://www.bren.ucsb.edu/research/current_gp.htm
Group Meetings

• Meet at least once weekly as a group
  • Do not meet at 11:30 – 12:30 on weekdays
  • Designated student meeting spaces:
    • Visitors Center - business hours
    • Manzanita (BH 4024) - business hours
    • Bonsai (BH 4402) - all hours

• Students (not advisors) schedule meetings and reserve meeting rooms
  • Reserve meeting rooms on Google Calendar
  • Email scheduling@bren.ucsb.edu
    • if student rooms are booked
    • to reserve media equipment
Computer Work Stations

• One computer per group in Commons or BH 1011

• Computer assignment map will be posted
  • Internal Services>Academic and Student Information>MESM Group Projects and Eco-E Projects

• Tentative move-in date: **Monday, May 8**
Project Funding

• Each group has a budget of $1,300
  • + $200 for printing.
  • Most group projects can be done on this budget

• If client has pledged additional funding (travel, supplies, ...) then client should pay these expenses directly, if possible.

• FM schedule meeting with Finance Team
  • learn financial procedures
  • obtain Project Code (Fund Number)
Contracts & Grants

• Money given to University for specific deliverables

• **Faculty** principal investigator (PI) writes proposal to funding organization
  • coordinates with Business Officer Kim Fugate

• **Must** be approved by the Office of Research (takes at least 1-2 weeks) before submission

• **Only** the Office of Research can accept contracts or grants
  • You can’t do this on your own!
Contracts & Grants

• Proposal must have budget including
  • indirect costs (“overhead”)
  • budget justification
  • clearly articulated deliverables
  • start and end date

• Indirect costs are 53%
  • e.g., client gives UCSB $100 ➔ you get only $47
Gifts

• All gifts coordinated by Director of Development

Gift overhead is 6%

• e.g., client gives UCSB $100 $94

• Active fundraising by students without guidance is NOT appropriate

• Under NO circumstances should you talk to anyone about giving a gift without first speaking with Assistant Dean for Development Lotus Vermeer!
Faculty Advisors

• Each group has one or two faculty advisors
  • GP: schedule **weekly** meetings with your advisor(s)
  • Eco-E: attend ESM 402A and meet with faculty advisor as needed.

• Your faculty advisor(s) will:
  • monitor progress
  • provide technical assistance & expertise
  • evaluate project
  • assign grades
  • Allow **at least** a week for feedback on anything written

• No two advisors alike
Faculty Advisors

- During your first meeting (this week!) discuss:
  - Expectations
  - Project scope
  - Objectives
  - Meeting schedule
  - Dates for spring review meeting
GP Clients

• Each Group Project has one primary client.
  • Eco-E Projects do not have clients.

• Client is the reason for the project, so be responsive to client’s guidance.

• Interact with client with absolutely the highest standards of professionalism.

• Client engagement depends on their availability and expertise.

• No two clients are alike.
GP Clients

• Meet with client & faculty advisor in week 2
  • Discuss project scope, objectives, deliverables, potential external advisory committee members, and internship, if relevant.

• When appropriate, invite your client to:
  • participate in spring & fall review meetings
  • attend defense in winter & public presentation in spring

• Write thank-you notes to client following review meetings and other milestones.

• ACKNOWLEDGE them frequently, privately and publicly (if they welcome this)
External or Technical Advisors

• Each group must engage 2+ external (GP) or technical (Eco-E) advisors
  • One additional advisor may be a Bren faculty member
• Interact with advisors with absolutely the highest standards of professionalism
• When appropriate, invite advisors to:
  • participate in spring & fall review meetings
  • attend defense in winter & public presentation in spring
• ACKNOWLEDGE them frequently, privately and publicly (if they welcome this)
**PhD Mentors**

- 8 PhD students volunteered to mentor Group Projects
- Not all groups have PhD mentors
- PhD mentor is expected to:
  - Meet with group and faculty advisor in week 1
  - Establish formal role/expectations with group and faculty advisor
  - Meet with group, faculty advisor and client in week 2
  - Schedule meetings with group, as needed
- PhD mentor expected to invest ~1 hour/week in spring
- PhD mentor may continue in fall and winter, if agreed upon by mentor, faculty advisor and group
- PhD mentor offers guidance, does NOT do group’s work
Additional Resources

• Research skills
  • Librarian Kristen LaBonte (klabonte@library.ucsb.edu)
  • Holds weekly office hours at Bren (Mon, 12:30 – 1:30 pm)
Human Subjects

If you are conducting a survey or working with human subjects as part of your project:

• You **MUST** obtain approval (or an exemption) from the Human Subjects Committee (HSC).
  
  • Eco-E students have a blanket exemption.

• **All** group members & faculty advisor will need to take the Human Subjects Exam.

• Consider taking **ESM 269 Survey Design** in Spring 2017.

• Review Office of Research site: [http://research.ucsb.edu/compliance](http://research.ucsb.edu/compliance)

*It could be a very big deal not to be in compliance.*
Non-Disclosure Agreements

• You likely will need a Non-Disclosure Agreement (NDA) if your client (or other source) will provide you with data that are confidential or restricted.

• Students may NOT sign an NDA under any circumstances.

• To prepare an NDA, your client must work with the Office of Technology and Industry Alliances.

• If you need an NDA, please contact Group Project Coordinator as soon as possible.
Summer Internships

• If GP summer internships promised, you may identify one group member to be Internship Coordinator (IC).

• Client may ask students to apply for internship(s).

• If the decision lies with students, decide EARLY who will do the internship(s).

• IC and/or intern(s) will work with Dave Parker & Kristi Birney to coordinate internships.

• If internship is paid, client should pay intern(s) directly.
Internship Funding

• For **low-paying** or **unpaid** internships only

• Client or group (**not** Career Team) identifies qualified student for internship.

• Application for internship funding is **open**, apply as soon as you are confirmed to accept a low-paying or unpaid internship.

• Students are encouraged to apply as soon as they have received an offer. The application can be accessed through the Online Network.

• For more information: **career@bren.ucsb.edu**
# Project Deliverables

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Group Project</th>
<th>Eco-E Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2017</td>
<td>• Develop work plan&lt;br&gt;• Work plan review meeting with Client and External Advisory Committee&lt;br&gt;• Website&lt;br&gt;• Self/peer evaluations</td>
<td>• Create team partnerships&lt;br&gt;• Develop business model&lt;br&gt;• Eco-E Opportunity Analysis Presentation to EEAC&lt;br&gt;• “Lessons Learned” to Eco-E Committee&lt;br&gt;• “Lessons Learned” to External Judging Panel&lt;br&gt;• Website&lt;br&gt;• Self/peer evaluations</td>
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<tr>
<td>Fall 2017</td>
<td>• Fall review meeting with External Advisory Committee</td>
<td>• “Lessons Learned” presentation to EEAC</td>
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<tr>
<td></td>
<td>• Draft paper/outline</td>
<td>• Technical Literature Review</td>
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<tr>
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<tr>
<td>Winter 2018</td>
<td>• Final report</td>
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<tr>
<td></td>
<td>• Project Brief</td>
<td>• Marketing collateral</td>
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<tr>
<td></td>
<td>• Final Presentation</td>
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<td>• Data/metadata</td>
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<td>• Faculty evaluation</td>
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*All students are **required** to participate in defense and final presentations.*
Authorship

• ALL group members MUST be acknowledged as co-authors on all deliverables produced by the group

• If you plan to publish results:
  • ALL group members must be invited to be co-authors
  • Consider inviting your faculty advisor to be a co-author

• The **only** exception is when ALL group members agree to a specific requirement for authorship
  • e.g., 2 units of ESM 596 in Spring 2018
  • in this case, some group members may elect **not** to be co-authors.
GP Review Meetings

• Plan Spring and Fall review meetings for weeks 8-10.

• Include all group members, faculty advisor, client (for GP), and external advisors.

• Invite participants at least two weeks in advance.

• Send meeting agenda and materials to all meeting participants at least one week in advance.

• If participants are not able to attend in person, make arrangements for teleconference (phone, Skype, etc.)

• Summarize feedback from spring review meeting and integrate into final work plan or business model.

• Send thank you notes to your client (for GP) and external advisors.
Project Defense

• Weeks 8-9 of winter quarter 2018
• Presented to advisor and 2+ other Bren faculty
• Opportunity to present and receive feedback from faculty on methods, analysis, results, and conclusions
• Focus on project’s scientific content
• Open to all Bren faculty and students
• May invite client (GP) and external advisors
Public Presentation

- Spring quarter: **Friday, April 27, 2018**
- General audience, including faculty, students, potential employers, community, and family members
- Focus on substance, key findings, and significance
  - not methods and analyses
- Poster session and reception follows
Start Doing NOW

- **Read** the Group Project or Eco-E Project guidelines
- Schedule group meetings
- Define roles (PM, FM, DM, OM, IC, E)
- Start developing your group
  - learn about each other
  - do something together
- Educate yourself about your project
- Confirm client’s funding commitments
  - work with Business Officer Kim Fugate
Problems

- Students have primary responsibility for solving problems
- Involve faculty advisors only after thorough efforts by group to solve problems
- Eco-E team partnership agreement has arbitration clause.
- If serious problems arise (rare), go to Group Project Coordinator or Assistant Dean
  - Written documentation is essential if an administrative solution is required
- Campus ombuds office: http://ombuds.ucsb.edu
Satie’s Words of Wisdom

- Master’s Project should not be all/overly consuming
- Issues with group members, advisor or clients may or may not arise
- This is one of the best preparations possible for your future career
- The work belongs to ALL group members
- Always reference others’ work, data, models
- Have fun!
Work Plan Elements

A. Title page
B. Executive summary (1 pg)
C. Objectives
D. Significance of the project
E. Background and literature review
F. Data Management Plan
G. Technical approach
H. Deliverables
I. Milestones
J. Management plan
K. Budget
L. References
Objectives

• Focus on one to three objectives.
• Tie data, analyses, results, conclusions, and deliverables to objectives.
• Objectives may shift as you gain knowledge.
• Monitor whether you are on track or need to re-orient.
Background/Lit Review

• Find out what is already known about your topic.
• Locate relevant papers, reports, and data.
• Systematically search the technical literature.
  • Meet with Research Librarian Kristen LaBonte (klabonte@library.ucsb.edu)
  • Mondays, 12:30 – 1:30 pm in BH 3310
• Know the relevant material, don’t just store it on your computer.
Data Management Plan

• What data will you need?

• Are these data available?
  • Yes ➜ Acquire them.
  • No ➜ When and how will you get them?

• Describe the data and their standard formats (e.g., XML, ASCII, CSV, .shp, .gdb, GeoTIFF)

• What metadata are needed to understand/use the data?

• Do you have the right to redistribute your data?

• To what extent can the data be shared?

• For assistance: collaboratory@library.ucsb.edu
Technical Approach

• Describe overall strategy and specific tasks to meet objectives.

• Use the data (or imagine data have arrived)
  • What will you do with them?
  • Describe analyses you will conduct to address objectives.
  • Conduct preliminary analyses and describe nature of results.

• Will results meet objectives?
Deliverables

• Short list of products for your client.
• Some deliverables can be completed in the early stages of the project.
• Monitor your list of deliverables to stay on track.
Milestones

• Identify key tasks
  • Deliverables for your client
  • Academic products
    • academic defense
    • final paper
    • project brief
    • poster
    • website
    • data and metadata
    • public presentation

• Identify milestones (when tasks will be completed)
  • Review (possibly reorganize) milestones at end of each quarter.
Management Plan

• How will you organize and manage yourselves?

• When/where/how often will you meet?
  • Do not meet at 11:30 am – 12:30 pm on weekdays!
    • reserved for colloquia and career talks (and faculty meetings!)
    • “lunch hour” will change to 11:00am-12:15pm in Fall 2017

• How will you ensure critical tasks are completed?

• How will you document, catalog, and archive information?

• How will you interact with faculty advisors, clients, and external advisors?

• What do you and your advisors expect from each other?

• How will you resolve conflicts?