

# Master's Project Kick-off **Class of 2019**

Casey Hankey, Group Project Coordinator  
April 2, 2018

# 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 27, 1:00-6:30 pm**
- Past Reports, Briefs, and Posters
  - GP: [http://bren.ucsb.edu/research/gp\\_past.html](http://bren.ucsb.edu/research/gp_past.html)

# Registration & Grading

- Register with your faculty advisor
  - **Spring 2018:** ESM 401A/402A (4 units)
  - **Fall 2018:** ESM 401B/402B (4 units) (IP grade)
  - **Winter 2019:** ESM 401C/402C (4 units) (grade applies to F18)
  - **Spring 2019:** 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** ESM 401/402 courses
  - Not every team member necessarily gets the same grade!

# 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 2019: Submit to Group Project Coordinator

# Project Management

- Decide 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** (concise, unique)
- By **April 6**: Report roles and alias to Group Project Coordinator Casey Hankey
- Attend relevant workshops

# Workshops

- **Client Relations** (Bren Career Team)
  - Tues, Apr 2, 11:00 am – 12:15 pm
- **Data management & computing** (Compute Team)
  - required for DM, date TBD
- **Research techniques** (Kristen LaBonte)
  - required for DM, recommended for all, date TBD
- **Project management** (2<sup>nd</sup> year MESM PMs)
  - Required for PM, 11:00 am – 12:00 pm, date TBD
- **Financial management** (Bridget Mastropietro)
  - required for FM, individual meetings to be scheduled in week 3
- **Outreach Manager Workshop – Research Storytelling** (Lisa Leombruni, Allison Horst)
  - required for OM, Weds, Apr 25, 11:00am-12:30pm
- **Web Design Workshop** (Rob Turner)
  - Tues, May 8, 6:00-8:00pm

# Website

- Each group must create (by Jun 15) 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 & significance of your project
  - [http://www.bren.ucsb.edu/research/current\\_gp.htm](http://www.bren.ucsb.edu/research/current_gp.htm)

# Group Meetings

- Meet at least twice weekly as a group
  - Once with faculty advisor, once with just students
  - **Do not meet** at 11:00 – 12:00 Mon-Thu
  - Designated student meeting spaces:
    - Visitors Center - business hours
    - Manzanita (BH 4329) - 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](mailto:scheduling@bren.ucsb.edu)
    - if student rooms are booked
    - to reserve media equipment



# Computer Work Stations

- One computer station assigned per group in BH 3330 or BH 1011
- Tentative move-in date: **Wednesday, May 9**

# Project Funding

- Each group has a budget of **\$1,300**
  - + **\$200** for printing at Bren
  - 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 **54%** (going to 55% July 1, 2018)
  - e.g., client gives UCSB \$100 → you get only **\$46**

# Gifts

- All gifts coordinated by Director of Development  
Gift overhead is **6%**
  - e.g., client gives UCSB \$100 → you get \$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 external 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

- 7 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

# 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) through the UCSB Office of Research
  - 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 2018 (T/R 9:30-10:45am)
- Review Office of Research site: <http://research.ucsb.edu/compliance>

*It could be a **very big deal** not to be in compliance.*

# Non-Disclosure Agreements

- If your client (or other source) will provide you with data that are confidential or restricted, you likely will need a **Non-Disclosure Agreement (NDA)**
- **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)
  - Not necessarily guaranteed to student co-authors
- If the decision lies with students, decide EARLY who will do the internship(s)
- IC and/or intern(s) can work with **Dave Parker & Kristi Birney** to coordinate internships
  - Can help strategize complex scenarios, but won't make hiring decisions
- If internship is paid, client should pay intern(s) directly

# Internship Funding

- For **low-paying** or **unpaid** internships only
  - Funding between \$1-3k based on a limited pool
- 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 for funding as soon as they have received an offer
- The application and additional information can be accessed through Bren Connect

# Project Deliverables

Quarter	Group Project	Eco-E Project
Spring 2018	<ul style="list-style-type: none"> <li>• Develop work plan</li> <li>• Work plan review meeting with Client and External Advisory Committee</li> <li>• Website</li> <li>• Self/peer evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Create team partnerships</li> <li>• Develop business model</li> <li>• Eco-E Opportunity Analysis Presentation to EEAC</li> <li>• “Lessons Learned” to Eco-E Committee</li> <li>• “Lessons Learned” to External Judging Panel</li> <li>• Website</li> <li>• Self/peer evaluations</li> </ul>



# Project Deliverables

Quarter	Group Project	Eco-E Project
Fall 2018	<ul style="list-style-type: none"><li>• Flash Talk</li><li>• Fall review meeting with External Advisory Committee</li><li>• Draft paper/outline</li><li>• Self/peer evaluations</li></ul>	<ul style="list-style-type: none"><li>• Flash Talk</li><li>• “Lessons Learned” presentation to EEAC</li><li>• Technical Literature Review</li><li>• Draft paper/outline</li><li>• Self/peer evaluations</li></ul>

# Project Deliverables

Quarter	Group Project	Eco-E Project
Winter 2019	<ul style="list-style-type: none"> <li>• Final report</li> <li>• Project Defenses</li> <li>• Self/peer evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Final report</li> <li>• Project Defenses</li> <li>• Competitions (TBD)</li> <li>• Self/peer evaluations</li> </ul>
Spring 2019	<ul style="list-style-type: none"> <li>• Poster</li> <li>• Project Brief</li> <li>• Final Presentation</li> <li>• Final website</li> <li>• Data/metadata</li> <li>• Faculty evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• Poster</li> <li>• Marketing collateral</li> <li>• Final Presentation</li> <li>• Final website</li> <li>• Competitions (TBD)</li> <li>• Faculty evaluation</li> </ul>

*\* All students are **required** to participate in defense and final presentations and present at one or both*

# 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 and/or PhD mentor to be a co-author
- The **only** exception is when ALL group members agree to a specific *additional* 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 2019
- 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 26, 2019**
- 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

# 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!



# To Do: Work Plan

- 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

# Workplan Timeline

- Consult Group Project Guidelines for Timeline

	Begin to develop approach to research	<ul style="list-style-type: none"><li>• Student and student/advisor meetings focus on approaches, research methods, data sources, and potential pilot analyses.</li></ul>
<b>Weeks 2-6</b> <b>Apr 9 – May 11</b>	Develop external advisory committee	<ul style="list-style-type: none"><li>• By Week 6, invite at least two people to serve as external advisors for the Group Project (one of the two or more external advisors may be another Bren faculty member).</li></ul>

# Start Doing NOW

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