



# Master's Project Defense Guidelines

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# Timeline of Deliverables

Date	Deliverable
Fri Feb 23	Due to advisor: Draft report
Mar 2, Mar 9	Master's Project Defenses in BH 1414
<b>Fri Mar 23</b>	Due to advisor & GP Coordinator: <b>Final report</b> with all signatures (pdf) and peer/self evaluations; grade applies to 401B&C/402B&C Due to GP Coordinator: Abstract for public presentation program
<i>Wed Apr 4</i>	<i>Poster Design Workshop</i>
<i>Wed Apr 11</i>	<i>Public Presentations Workshop</i>
Fri Apr 13	Due to advisor: Draft brief and draft poster
Fri Apr 20	Final Project Brief and Project Poster (.pdf version) due to faculty advisors & GP Coordinator and posted on project website
Apr 19-24	Practice and filming of public presentations
No later than Mon Apr 23	Print Final Poster and Project Briefs
<b>Fri Apr 27</b>	Master's Project <b>Public Presentations</b>

# Purpose of Defense

- **Check-in** with Bren faculty to confirm that your project is on track
- Not a **final** defense!
- **Consolidate, organize** and **present** your work to advisor and 2 faculty reviewers
- Faculty **reviewers** ask questions and offer suggestions based on your presentation
- Faculty **advisor** (not reviewers) provides detailed feedback on draft report and grades final report

# Defense Audience

- Two independent faculty reviewers
- Faculty advisor
- Open to the public (but not advertised beyond Bren community)
- If you would like your client and external advisory committee members to attend, you should invite them

# Defense Schedule March 2

<b>March 2</b>	<b>Group</b>	<b>Advisor</b>	<b>Reviewer</b>	<b>Reviewer</b>
<b>900-940</b>	<b>tejdrones</b>	Frew	Tilman	Dozier
<b>945-1025</b>	<b>bluenote (eco-e)</b>	Dozer/Cotter	Caylor	Plantinga
<b>1030-1110</b>	<b>instreamimpact</b>	Salzman	Caylor	Anderson
<b>1115-1155</b>	<b>nextGENwater</b>	Holden	Jasechko	Potoski
<b>12:00-12:40</b>	<b>basinbenefits</b>	Larsen	Jasechko	Dunne
<i>1240-100</i>	<i>Break</i>			
<b>100-140</b>	<b>uclivinglabs</b>	Melack	Tilman	Plantinga
<b>145-225</b>	<b>tetonrecharge</b>	Libecap	Tague	Deschenes
<b>230-310</b>	<b>musselflexers</b>	Lenihan	Kendall	Costello
<b>315-355</b>	<b>merluccius</b>	Costello	Gaines	Lenihan
<b>400-440</b>	<b>clawlesslobsters</b>	Gaines	Costello	Larsen

# Defense Schedule March 9

<b>March 10</b>	<b>Group</b>	<b>Advisor</b>	<b>Reviewer</b>	<b>Reviewer</b>
<b>900-940</b>	<b>energychoice</b>	Buntaine	Lea	Suh
<b>945-1025</b>	<b>solarstash</b>	Geyer	Anderson	Suh
<b>1030-1110</b>	<b>enerficiency (eco-e)</b>	Suh/Cotter	Geyer	Potoski
<b>1115-1155</b>	<b>blacksheepapparel (eco-e)</b>	Potoski/Cotter	Geyer	Buntaine
<i>1200-100</i>	<i>break</i>			
<b>100-140</b>	<b>savingsierras</b>	Tague	Larsen	Anderson
<b>145-225</b>	<b>saltonseafarers</b>	Plantinga	Stevenson	Tague
<b>230-310</b>	<b>mnheadwaters</b>	Caylor	Keller	Dunne
<b>315-355</b>	<b>westcoastresilienseas</b>	Kendall	Selkoe	Stevenson
<b>400-440</b>	<b>gogobies</b>	Keller	Holden	Melack

# Planning the Defense

- **40 minutes total**
  - for presentation and questions
- **20-25 minutes of presentation**
  - 2 speakers, preferred
  - 3 speakers, need to practice seamless transitions
- **15-20 minutes of questions**
  - From reviewers
  - Targeted to entire group
- If there is time left over, the audience may ask questions

# Defense Elements

Topic	*Approx. # of slides
Title slide	1
Problem and/or questions	1-3
Objectives	1
Data sources	3
Methodology	5
Results	3-5
Analysis of results (link to objectives)	3-5
Conclusions and/or recommendations	1
Acknowledgments (at beginning or end)	1
Total	20-25

\*Actual number of slides and order/organization may vary, depending on the project!

# Project Title

Group Project members

Advisor

Client

Master's Project Defense

Bren School of Environmental Science & Management

Date

# Introduction

- Problem/questions
  - Clearly define
  - Include sufficient background
  - Provide appropriate context
- Objectives
  - Clearly state
  - Each should be linked to data, methodology & results



# Data & Methodology

- Data sources
  - Identify data sources used
  - Describe the data relevance, completeness and gaps
- Methodology
  - Explain what methods (including quantitative analyses) were used to analyze the data
  - Explain why you chose these methods

# Visuals

- Outline your presentation so your visuals flow
- Use visuals to illustrate your material
- Do not use unnecessary visuals or flashy animations!
- Be creative about how to show scientific findings
- Graphs and tables (and possibly equations) are appropriate for an academic defense
- Use clear titles
- Label graphs and tables clearly
- Verbally step through equations, piece by piece



# Results

- Present results
  - Include tables, figures, and graphics to show quantitative results
  - Fully explain tables and figures
- Analyze your results
  - What do the results mean?
- Articulate how the results are linked to your original objectives & significance



# Ending

- Conclusions/Recommendations
  - Summarize key findings
  - Describe implications based solidly on your results
  - If appropriate, provide recommendations to your client based on your findings
  - Identify lingering or new questions and next steps
- Acknowledgments
  - Thank your client(s), advisor(s), funders, and collaborators

# Speakers

- **Introduce** the members of your group (first and last names)
- Speak **slowly** and **clearly**
- **Avoid fillers**: “um,” “like,” “kind of,” “sort of”
- **No apologies!**
- Practice **smooth transitions** between speakers
- Designate a **back-up speaker** for every speaker who plans to present
  - If the primary speaker is sick or has an emergency, the back-up speaker must be ready to present.
- Be present and ready to mic-up when the previous group concludes!

# Audio/Video

- Speakers will wear wireless microphones so we can capture sound on video.
- Wear appropriate clothing for mics
- Turn microphone to mute when you are not speaking.
- When you are speaking:
  - Turn your microphone on!
  - Look at the audience (not at computer or slides)
  - Try not to use notes
  - If you need notes, use short points to jog your memory. Do not write out your entire script!
- Bring a flashdrive for video transfer and give to media cart

# Panelists

- Sit up straight and look alert
- Direct your enthusiastic gaze to the speaker (best) or audience
- Do not talk to each other
- Do not wave at or otherwise communicate with people in the audience
- Turn off cell phones and other disruptive devices
- Be engaged in Q + A
- Clear the table of cups, papers, pens, etc., when you leave

## Transition to Questions

Formally conclude your presentation and invite questions with a statement. For example:

- *“Now we would like to take questions from our faculty reviewers. If any time remains following their questions, we will open the discussion to the rest of the audience.”*

# Questions

- **Identify** potential questions in advance and discuss appropriate responses
- Divide topics such that each group member plans to cover topics with which s/he is most familiar
- Designate a **facilitator** to manage questions

# Strategies for Q+A

- **Repeat the question**
- Be direct and succinct in your answers
- If you don't know the answer, say so
- Do not fudge responses to questions if you don't know the answer!
  - Provide related information if you have it
  - Ask reviewers or audience if they have information to help answer the question
  - Investigate the question further (after the defense) if the question has important implications for your project

# Evaluation Format

- Faculty reviewers will:
  - Ask questions
  - Provide oral and/or written feedback based on presentation
- Reviewers are not expected to read your draft report or provide detailed comments
- Your faculty advisor will provide feedback on your draft report and grade your final report
- Students should consider how to incorporate reviewers' feedback into final reports and presentations

# Evaluation Content

- Based on MESM Program Learning Objectives (PLOs)
- **PLO3: Research Methods & Analysis**
  - Clearly defined the objective/problem and its significance; addressed the objective/problem within an appropriate scope
  - Assembled appropriate and adequate data to address the objective/problem
  - Designed and implemented a rigorous study using appropriate methods, measures and techniques
  - Critically evaluated results for the purpose of solving environmental problems
  - Clearly articulated robust conclusions, recommendations and/or implications based solidly on results.

# Evaluation Content – cont'd

- **PLO4: Scholarly Communication**

- Structured a coherent, rigorous and compelling argument and delivered a professional quality presentation.

- Scores 1-4 possible for each section

- Total 6-10 = Excellent
- 11-15 = Good (Some Opportunities for Improvement)
- 16-20 = Average (Revisions Recommended)
- 21-24 = Poor (Revisions Required)

Questions??

