

University of Colorado Graduate Seminar Discussion - Bayesian Updating  
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Suggests for Promoting Successful Discussions

We are all here to learn more about Bayesian Updating and how it might be applied to different aspects of biology. Since this is a discussion-based course the amount that we learn from the course will depend on how well everyone in the group prepares and engages in positive and thoughtful discussion. With that goal in mind, we discussed as a group some of the things that can foster successful seminar discussions. These are some of the tips we came up with as a class.

**Tips for Successful Seminar Discussions:**

Discussion Leader Prior to Discussion

- Select papers for discussion that are relevant to the topic and that are likely to be of interest and understandable to the group.
- Read the paper before circulating it to others so you can be sure it is relevant.
  - If the paper is overly long, technical or niche, you should be expected to carry much more of the weight in terms of leading the discussion.
- Circulate the paper to the class at least one week in advance.
- Prepare some discussion starters or prompts in advance. These often need to be somewhat specific. A general question like “What did you think?” is likely to fall flat. Too specific a question or leading a question is also likely to elicit no response “Did anyone else see a problem with equation 2?”. Try intermediate questions like:
  - “Do you think the authors’ conclusions were supported by their results?”
  - “Were there any aspects of the methods that you didn’t understand or that you disagreed with?”
  - “What aspect of the paper surprised you the most or caused you to think about some aspect of your own research?”

Discussants Prior to Discussion

- Read the paper thoroughly. This will often require reading the paper more than once.
- Look up terminology or acronyms you don’t know.

Discussion Leader During the Discussion

- Make sure that everyone understands the basics of the paper including its intent, terminology, acronyms, methods, etc. Set aside some time at the start of the discussion for clarification.
- Provide examples to help clarify concepts, especially complex ones.
- Guiding the discussion to particular areas of the paper can help to focus the discussion.

- Don't be afraid to let the discussion flow. You are in charge of facilitating, but you don't need to control the discussion. If the discussion is interesting then sometimes it is most interesting to "let it run". If we get too far off track then bring the discussion back home.

#### Discussants During the Discussion

- Leave space for everyone to participate. Contribute, but if you have already said three things, then perhaps remain silent to allow for others to contribute.
- Stay positive. We want to be rigorous, but being critical of a paper is only level 2 in depth of discussion. Let's try and push to level 3. What could have been done differently? What might be done next?
  - Level 1 - Understand
  - Level 2 - Critique/Criticize
  - Level 3 - Build/Create