BISC 585  
Scientific Writing and Reviewing

Instructors:  
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Day and Time, Course format:  
Mondays, 8-10AM  
Virtual (online: Zoom). No in-person meetings

Book  
Required reading:  
Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded by Joshua Schimel

Suggested reading:  
The elements of Style by Strunk and White (any version)

Jan 10 - Organizational/Introductory meeting (short planning meeting)  
Review syllabus  
Course expectations/ethics/process  
1st practice proposal handed out (Reviews due Feb 7, Panel on Feb14

Jan 24 Overview of the proposal process  
Discussion of the grant funding process  
- agencies and foundations  
- proposal process  
- review process (peer and program manager roles)  
Brief overview of the NSF review process  
- Mail Reviews  
- Panel Reviews  
- Ethics of review

Budget Guidance!!  
Schimel ‘Message Box’ assigned

Jan 31 - NSF and Fastlane (Grants.gov)  
Introduction to NSF proposal submission process  
‘Hands-on’ view of electronic submission (surfing Fastlane)  
The nuts and bolts of NSF proposals  
- Criterion 1 (Intellectual Merit)  
  planning a project (scope, focus)  
- Criterion 2 (Broader Impacts)
issues and options (how to make it work)
- Data Management Plan
- Miscellaneous (postdoc plan, ship time, subcontracts, ancillary docs)
- How to put together a budget
  - Discussion of budget strategies (political and practical)
  - Realities of budget limitations
The Proposal submission process within USC
Proposal #1 assigned for peer reviews.
Schimel ‘Message Box’ (for your proposal) due to Eric and Dave via email.

**Feb 7 – no class today**
Work on proposal budget and outline
Reviews for Proposal #1 due TODAY (Feb 7) at NOON via email to Dave and Eric as a Word doc (your name in file name but NOT in the review text; reviews are anonymous), for Panel Review on Feb 14

**Feb 14 – Practice Review #1**
Conduct Panel review of proposal #1
Budget due for your proposal due
Assign proposal #2 for next Panel review

**Feb 28 – Team and Leadership**
How to hire, who to hire, when to hire
  - The process
  - The ethics of hiring
  - Personnel management and the system
  - Resources (and hurdles) to hiring within the university
  - How to handle problems - what to avoid - what to manage
Collaborators & Subcontracts
Leadership and Project Management (What’s the difference?)
Project Management Issues and Tools
  - How to handle groups
  - Ego management
  - Authorship issues
  - Top-down vs bottom up management styles
  - How to manage conflicts
Group projects and single investigator projects
Proposal #2 peer reviews and Student proposal outlines due

**Mar 7**
Conduct Panel review on Proposal #2

**Mar 21**
Evaluate the review process from the mock panels
Discussion of student proposal outlines
Fully cited Methods section based on budget due
Mar 28 - Project Management
How to read a budget (cash flow and annual account balances)
How to track a budget (practical example from USC: ASR)
How to manage the purchasing process
What to do if you have budget troubles

***Review of student proposal progress***
Open discussion session on issues arising in writing

Apr 4 – no class
Work on your proposals!
Make sure to consult with your advisor

April 11 - Career Paths
Overview of the academic community and career paths in marine science
- professoriate, government, NGOs, other
- academic hiring process
  - tenure process
  - post-tenure career options and paths
  - expectations for advancement in each
- Career activity profile (research, education, service)
- Questions, conceptions, misconceptions

April 18 – ***Student proposals due*** (sent to Dave and Eric by noon)
Begin peer reviews of proposals
Classmate proposals will be emailed by 12noon.

April 25 - ***Student proposal reviews due*** (sent to Dave and Eric by noon)
1st, 2nd, 3rd Readers assigned for all proposals (TBA).

TBD - Proposal panel #1
Panel reviews of 1/2 proposals (TBA)

TBD - Proposal panel #2
Panel reviews of 1/2 proposals (TBA)

Last Day of Classes April 29th
Exams: May 4-11