**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 25 - Organizational/Introductory meeting (short planning meeting)**

Review syllabus

Course expectations/ethics/process

1st practice proposal handed out (Reviews due Feb15, Panel on Feb22)

**Feb 1 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

Schimel ‘Message Box’ assigned.

**Feb 8 - 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 15 – no class today**

Work on proposal budget and outline

Reviews for Proposal #1 due TODAY (Feb 15) 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 Feb22)

**Feb 22 – Practice Review #1**

Conduct Panel review of proposal #1

Budget due for your proposal due

Assign proposal #2 for next Panel review

# Mar 1 – 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 reviewsand Student proposal outlinesdue

**Mar 8**

Conduct Panel review on Proposal #2

**Mar 15**

Evaluate the review process from the mock panels

Discussion of student proposal outlines

Fully cited Methods section based on budget due

# Mar 22 - 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

**Mar 29 – no class**

Work on your proposals!

Make sure to consult with your advisor

# April 5 - 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 12 – \*\*\*Student proposals due\*\*\* (sent to Dave and Eric by noon)

Begin peer reviews of proposals

Classmate proposals will be emailed by 12noon.

# April 19 - \*\*\*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 30th**