

COURSE

WIPP 7001

Writing in the Disciplines Teaching
Seminar for Biology GLAs

OFFERED

Monday evenings, two sections in the
fall and one section in the spring

50%

of STEM PhD grads go on to teach
undergraduate science students
[NASEM 2018]

55+

hours of pedagogy training to boost
grad students' chances of getting a
faculty position [Connolly et al. 2016]

Problems this course addresses:

**2.1 MILLION UNDERGRADUATE SCIENCE STUDENTS AT
RESEARCH INSTITUTIONS**
(SCIENCE AND ENGINEERING INDICATORS 2018)



**INVESTMENT IN TEACHING IS UNDERRATED &
UNDER-PRIORITIZED**
(AGARWAL, BUCKS, & MURPHY 2020).

What's more. . .

- **Graduate students** encounter the perception that teaching is not as important as research (Agarwal, Bucks, & Murphy 2020).
- **Graduate students** may lack substantive teaching experience and teaching development opportunities (Agarwal, Bucks, & Murphy 2020; Goodwin et al. 2018).
- Almost 50% of **PhD candidates graduating in STEM fields** accept jobs that involve undergraduate teaching (NASEM 2018).
- “**STEM graduate training** does not adequately offer opportunities for future faculty to develop as integrated scholars” (Crowder & Monfared 2020).

What GLAs say about WIPP 7001. . .

On teaching students how to write:

“A large portion of my students have a significant improvement in their writing, in particular, lab report writing.”

On using writing as a mode of learning:

“It was nice to see some students demonstrate solid understanding of the concepts we were learning about in class through their writing.”

On class activities:

“The 5 minute teach was very helpful. I am glad I have that tool to use in my classes going forward. I also think the annotated bibliography assignment was a great way to expose us to a whole area of literature that is highly relevant, but perhaps not prioritized by many departments.”

“I enjoyed the five minute teach incorporated in WIPP 7001. It helped me teach students specific writing skills that they were lacking in scientific writing.”

“The feedback workshops were very helpful for me when preparing to grade and provide feedback on my student's articles.”

On the class as a whole::

“I enjoyed this course and am grateful to now have knowledge and skills to be a better teacher and to create better teaching materials.”

Benefits of investing in your teaching:

- Engagement in pedagogy seminars can enhance graduate students' **confidence in their abilities to teach** (Connolly, Lee, and Savoy 2018).
- Graduate students who participate in more teaching development seminars are more likely to get a **job as a college or university faculty member** (Connolly et al. 2016).
- **Teaching and research are not mutually exclusive!** Graduate students can invest in both—and even find synergy among the diverse aspects of their professional lives (Bowden 2007; Hattie and Marsh 1996; Feldon et al. 2011; Callaghan and Coldwell 2014).

Why writing pedagogy?

Writing is a high-impact practice (Kuh 2008), one of eight instructional practices that have been shown to contribute substantially to student learning and retention.

—George D. Kuh, *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* (AAC&U, 2008).

Writing is “the most intensive and demanding tool for eliciting sustained critical thought” (xiii).

—John Bean, *Engaging Ideas* (2001)

Writing makes it possible for instructors to establish a more meaningful and engaging learning environment (62–63).

—Ken Bain, *What the Best College Teachers Do* (2004)

“The relationship between the amount of writing for a course and students’ level of engagement...is stronger than the relationship between students’ engagement and any other course characteristic” (55).

—Richard Light, *Making the Most of College* (2001)

GLAs reported more confidence in the following skills by the end of WIPP

7001:

