Connecting the Dots: Student Success in Systems Engineering

Fall 2021 Lecture Series

How to Succeed in Academia
Dr. Erika Miller
Friday, September 10, 2021
12:00 p.m. - 1:00 p.m. MT
Updated Location: LSC 322 & Zoom

How to be an Academic Writer
Dr. Steve Conrad
Friday, September 24, 2021
12:00 p.m. - 1:00 p.m. MT
Updated Location: LSC 324 & Zoom

Ph.D. Intensive Writing
Dr. Steve Conrad
Friday, October 8, 2021
12:00 p.m. - 1:00 p.m. MT
Updated Location: LSC 322 & Zoom

What is Systems Engineering?
Dr. Tom Bradley
Friday, October 22, 2021
12:00 p.m. - 1:00 p.m. MT
Updated Location: LSC 376-378 & Zoom

A light lunch & coffee/tea will be provided. Join us at 11:00 a.m. for an informal get-together before the talk!
Brief outline of today’s talk

1. Really good advice that few follow
2. Practical guidance for intensive PhD writing
   - Open discussion

https://pollev.com/stevenconrad833
How long does it take to write a dissertation/thesis?

DIAMONDS ARE A GIRLS BEST FRIEND
How many hours do you think you will need to spend writing your dissertation (not including research and analysis)?

- Less than a month (180 hours): 25%
- Between 1 month (180 hours) and 3 months (540 hours): 42%
- Between 3 months (540 hours) and 6 months (1080 hours): 33%
- Between 6 months (1080 hours) and 1 year (2160 hours)
- I’ve already spent more than a year on it!
Faculty responses

- 14%: Less than a month (180 hours)
- 29%: Between 1 month (180 hours) and 3 months (540 hours)
- 43%: Between 3 months (540 hours) and 6 months (1080 hours)
- 14%: Between 6 months (1080 hours) and 1 year (2160 hours)
- I can't even recall but it was definitely more than a year!

How many hours do you estimate you spent writing your dissertation (not including research and analysis)?
What do you feel is your current greatest challenge to writing?

**Comic:**

1. Why? Why can’t I write?!
2. Ahh! Look at the time!
3. Type type type!
4. Zzzz...

**Text:**

WIRITING: THE THING THAT HAPPENS IN BETWEEN EXHAUSTING YOUR DEADLINE AND EXHAUSTING YOURSELF.

WWW.PHDCOMICS.COM
What do you feel is your current greatest challenge to writing?

- Dedicating time to writing: 20%
- Selecting too big of a topic: 40%
- Organizing my thoughts: 33%
- Grammar not good:
- Structure and composition: 33%
- Understanding expectations: 7%
- Receiving timely feedback:
- University Requirements:
- Technology:
Faculty responses

- Dedicating time to writing: 31.25%
- Selecting too big of a topic: 12.50%
- Organizing my thoughts: 18.75%
- Understanding expectations: 18.75%
- Receiving timely feedback: 18.75%
Top 5 tips that few follow

WR ... I ... T ... E...
W ... R ... I ... T...

GURGLE...

SLLLLWRRRRRRPPP...

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WRITING: JUST ADD COFFEE.

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CSU Number 1!
TIP # 1: Set a writing schedule

Do you use a "writing schedule" when writing?
Do you use a "writing schedule" when writing?

- definitely do not - I write at random times when I can find the time: 77%
- do not - unless you count writing day and night for six months a schedule
- do - I have some preferred writing times that work for me: 15%
- definitely do - I had a set schedule that I stick to: 8%
Faculty responses

- 14%: definitely did not - I wrote at random times when I could find the time
- 43%: did not - unless you count writing day and night for six months a schedule
- 43%: mostly did - I had some preferred writing times that worked for me
- 0%: definitely did - I had a set schedule that I stuck to
Number 2!
TIP # 2: Ask for feedback

How often do you ask for feedback on your writing?
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Have someone else review your work
How often do you ask for feedback on your writing?

- Only when requested: 21%
- At scheduled times (quarterly for example): 21%
- At each check-in with my advisor: 36%
- Anytime I can get someone to look at my work: 21%
Hours

How many hours do you estimate you spent writing your dissertation (not including research and analysis)?

Faculty responses

- Only when requested: 16.67%
- At scheduled times during my PhD: 16.67%
- At each check-in with my advisor: 50.00%
- Anytime I could get someone to look at my work: 16.67%
Number 3!
TIP # 3: Just Write…

Given only two choices - which of the following sentences best describes your writing process?
Given only two choices - which of the following sentences best describes your writing process?

- I write freely and edit later: 62%
- I struggle to make each sentence perfect the first time: 38%
Faculty responses

- 28.57% I write freely and edit later
- 71.43% I struggle to make each sentence perfect the first time
Number 4!
Tip # 4: Appreciate Criticism

How well do you feel you handle feedback and criticism of your writing?
How well do you feel you handle feedback and criticism of your writing?

- Not well at all: 15%
- Slightly well: 15%
- Moderately well: 38%
- Very well: 38%
- Extremely well: 8%
Faculty responses

- 71.43% Not well at all
- 14.29% Slightly well
- 14.29% Moderately well
- Very well
- Extremely well
Number 5!
Tip # 5: Edit, Edit, Edit, Edit, Edit...

- Allow for flexibility in your writing – move around between sections – don’t force yourself to write sequentially
- Recognize that your first draft is NOT your final draft, nor is your final draft your final draft
- Write your introductions last
- Allow time to review later
Practical advice for intensive PhD writing

1. Adopt a reference manager – and make notes about the literature you read and why it’s important to your research

2. Write as you research – document your methods as you do them, make improvements

3. Write “something” every day – set aside 15-30 minutes while you are researching, then 2-3 hours at the “intensive” stage

4. Have a professional editor and technical writer read it
Practical advice for intensive PhD writing

5. Read through finished dissertations similar to your topics
6. Use technology – adopt a grammar tool like https://app.grammarly.com/
7. Join or start a writing support group
8. Book dedicated time with your advisor to review – push for feedback
9. Just write… …
Resources shared during the seminar

• https://www.mendeley.com/reference-management/reference-manager
• https://www.zotero.org/
• https://mountainscholar.org/handle/10217/199888 - past theses and dissertations from our department!
• https://www.engr.colostate.edu/se/research-areas/
Celebrate!