



The University of Texas at Austin

# Being an Effective UTCS Graduate Student

John Thywissen • 28 Aug 2017

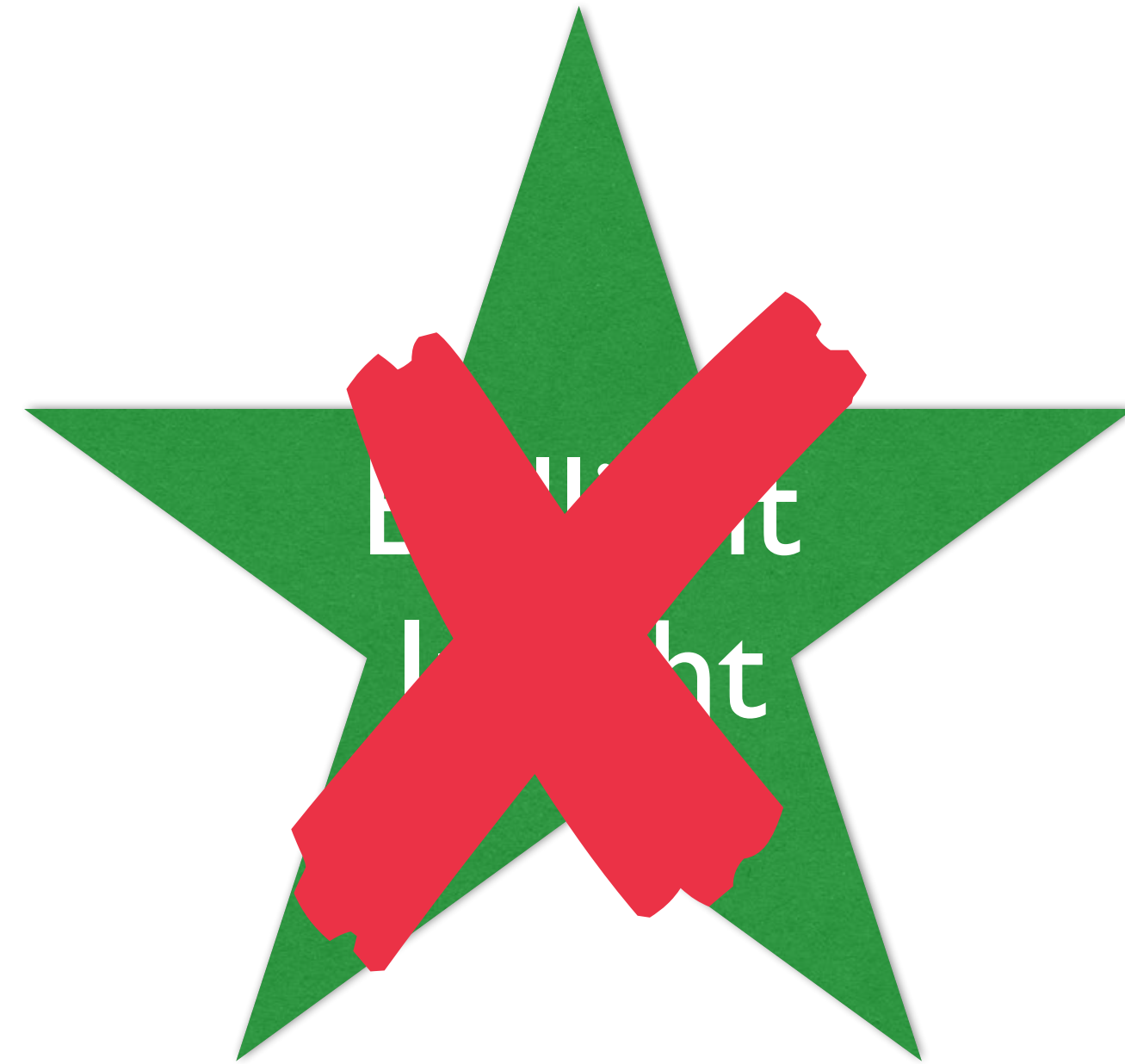
# Begin at the End:

# Begin at the End: Goal: *Published Research*

# Idealized research process



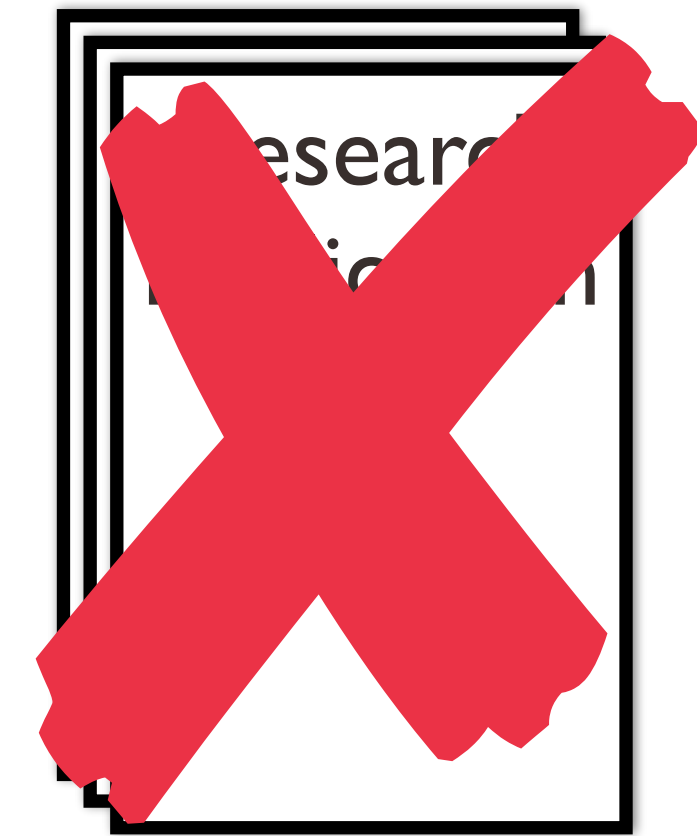
# Idealized picture is dangerously misleading



Not novel

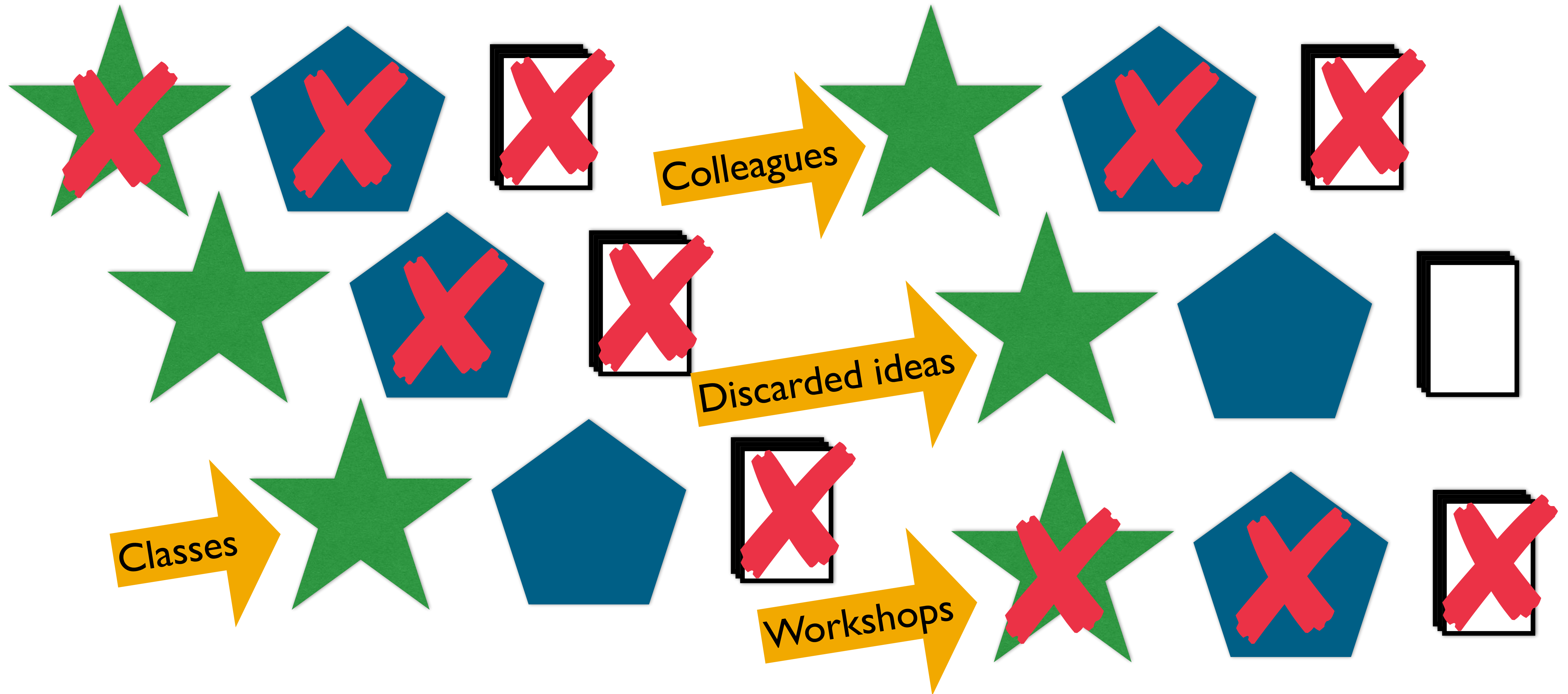


Infeasible



Unpublishable

# Research is a stochastic process



## Listen: The World is Streaming Research Ideas at You

- Go to department **talks**.
- Join a **reading group**. Can't find a good one? *Start one*.
  - GRACS reading group list: <http://wiki.cs.utexas.edu/gracs/ReadingGroups>
- Participate in **workshops**.
- Skim though **proceedings** and **magazines** from ACM/IEEE/SIAM...

## Foundations for Effectiveness: Six parts

1. Self-discipline
2. Skill and proficiency in processes and tools:
  - Task and time management
  - Academic writing and speaking
  - Development tools (for your area)
3. Self-awareness
4. Knowledge in area
5. Collaboration with fellow students and faculty
6. Effective use of group, UTCS and University resources



# Time Management

## Control your time

Eliminate distractions:

This requires both self-discipline and self-awareness: Decide: It's time to work, or it's time to play. Both are legitimate, but *decide consciously*.

## Don't waste others' time

Be slightly early:

*“If you're on time, you're late.”*

## Track your time

	M	T	W	R	F	S	N
07:12	M10						
08:00	M11						
08:48	M12						
09:36	M13						
10:24	M14						
11:12	M15						
12:00	M16						
12:48	M17	PL Lunch					
13:36	M18	C S 105 Lecture & Office hours		C S 105 Lecture & Office Hours			
14:24	M19						
15:12	M20		PHL 391	Research Group Meeting			
16:00	M21						
16:48	M22						
17:36	M23						
18:24	M24						
19:12	M25						
20:00	M26						
20:48	M27						
21:36	M28						
22:24	M29						

# Task Management

Get (or build) a process to track tasks.

Notes on scraps of paper will *not* work.

Leaving messages in your inbox will *not* work.

“Just remembering” will *not* work.

Your task management process:

- Must be **reliable** enough that you can **trust** it, and
- Must be **simple** enough that you use it **everyday**, and
- Must be **scalable** enough to handle **multiple** simultaneous **projects**.

Suggestion: the GTD system by David Allen:

<http://gettingthingsdone.com>

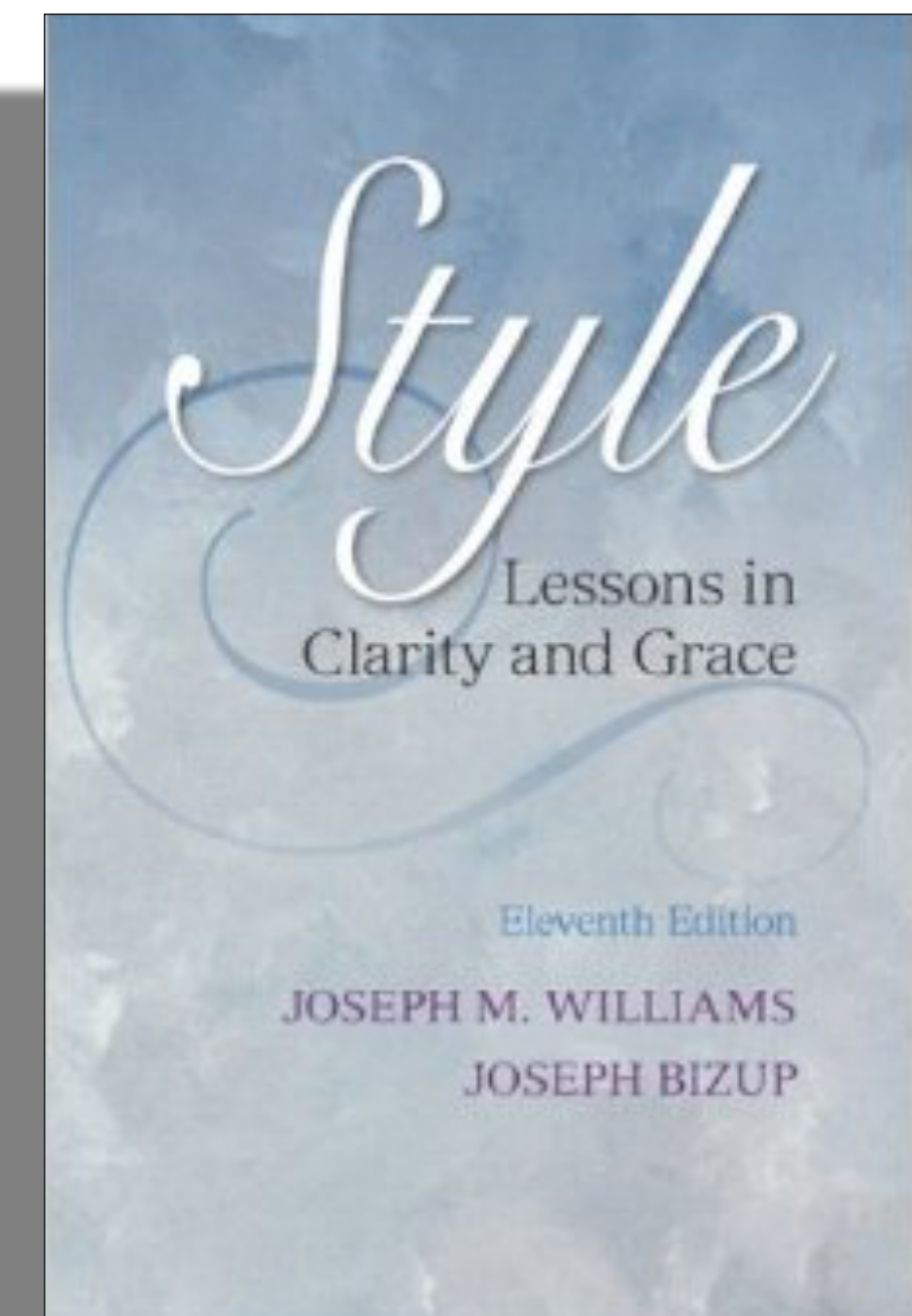
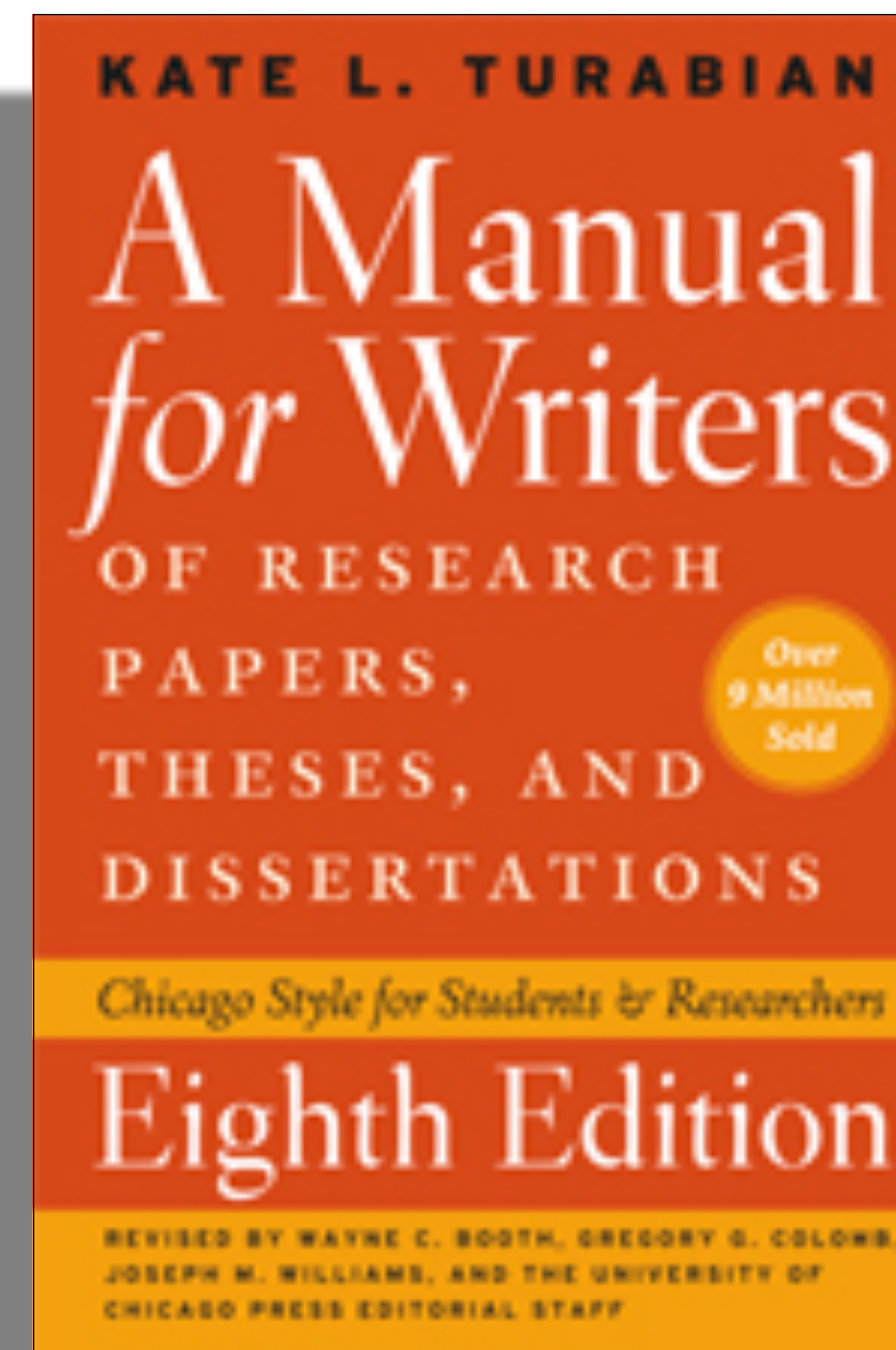
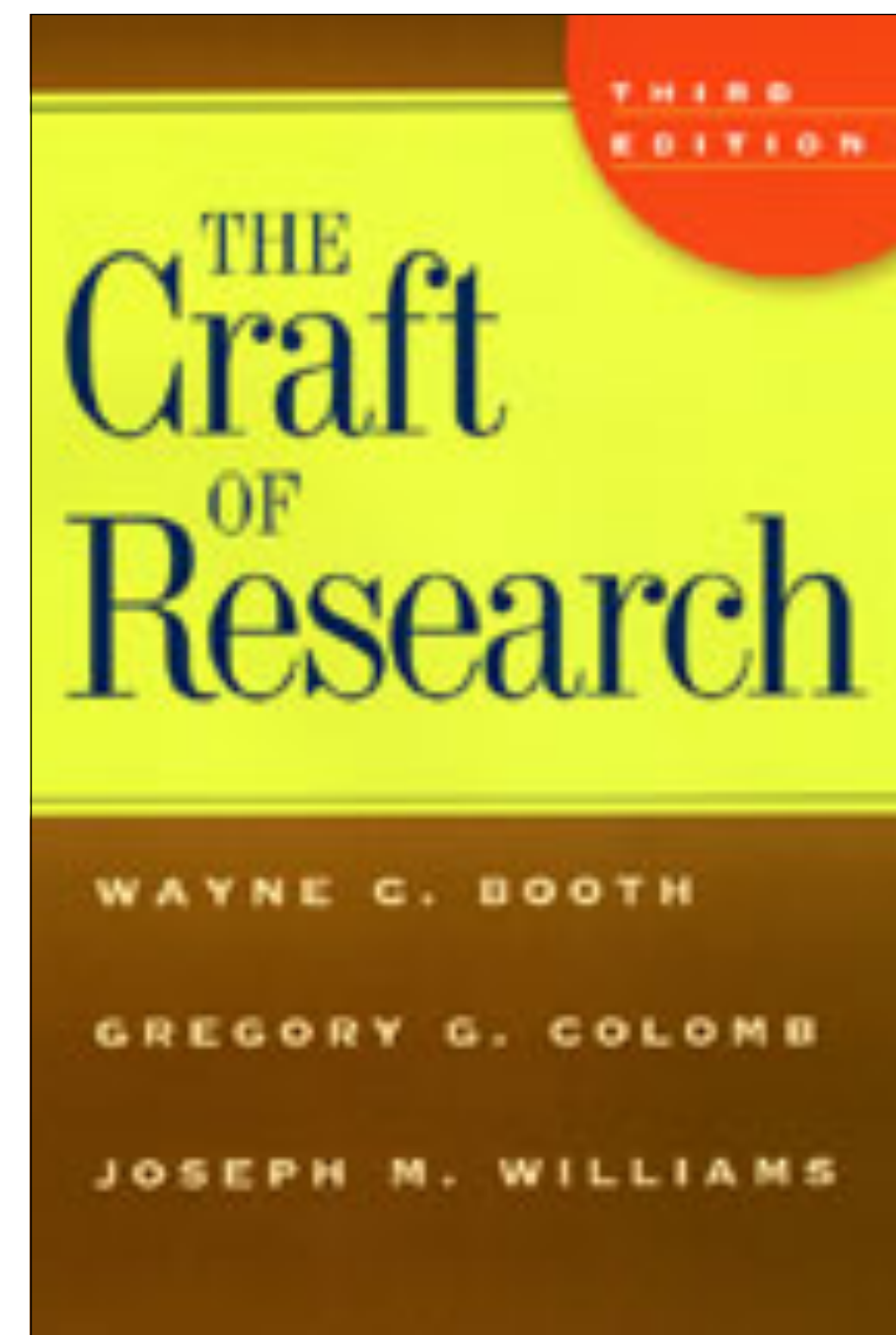


# Academic Writing and Speaking

- There are many books and talks on academic writing and speaking.
- Get a few, read them, and then **practice**. This is a skill, so you must **do it** in order to learn it.
- Take opportunities to write and speak. Ask for feedback from the readers/audience.
- Tip:* Track everything you've read in a citation manager (examples: Zotero or BibDesk).

Suggestions for books on writing:

- The Craft of Research*  
ISBN 0-226-06566-9 \$9
- Turabian  
ISBN 0-226-81638-9 \$13
- Style: Lessons in Clarity and Grace*  
ISBN 0-321-89868-0 \$16

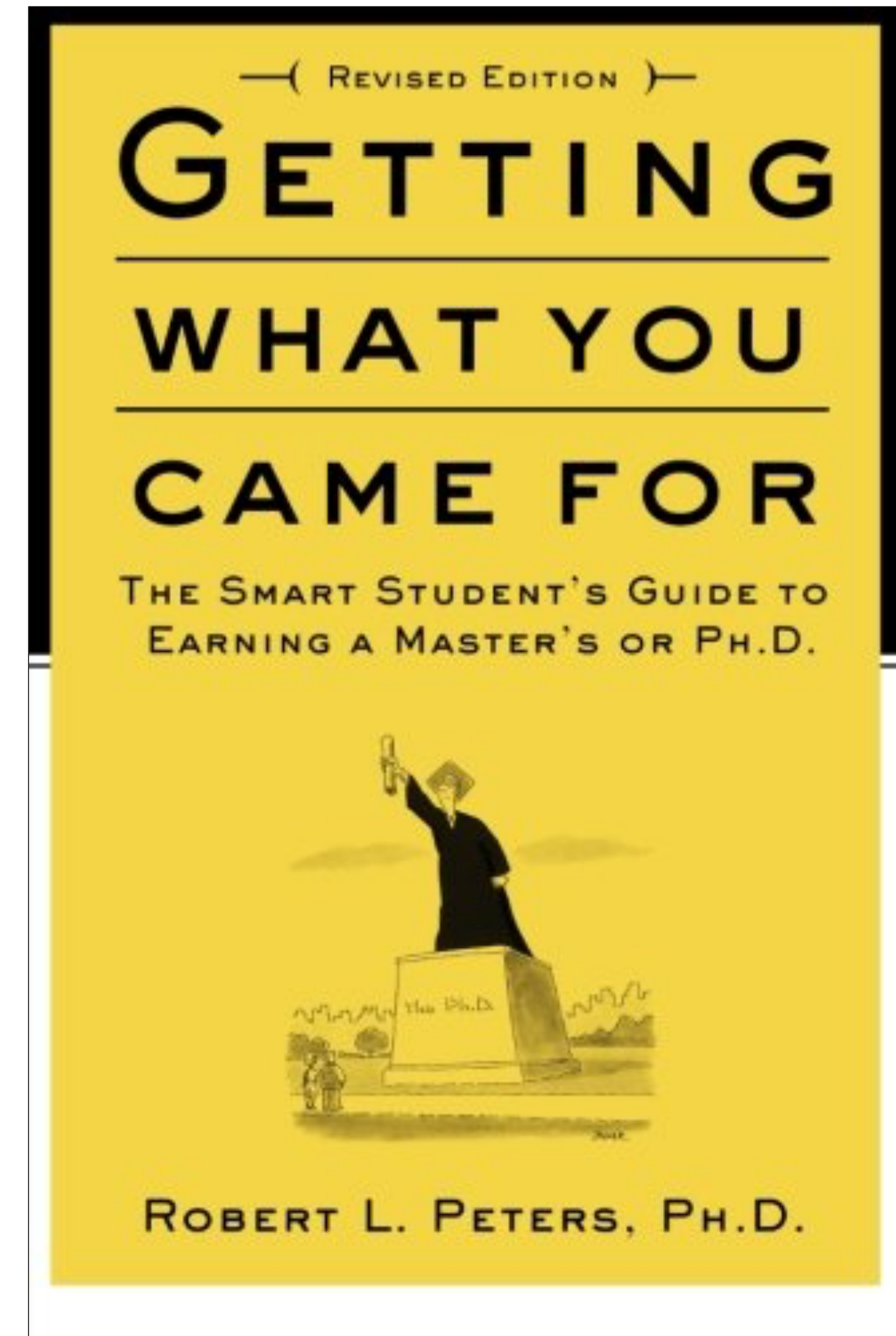


## Collaboration with fellow students and faculty

- Again, join (or start) a reading group in your interest area.
- Go to research group meetings.
  - Use as speaking practice venue.
- Faculty meetings: conference course/advisor meeting:  
Roughly 1 hour/week.
  - Agree on goals for the semester.
  - Use as a writing practice venue.

## More advice

Peters, Robert L. *Getting What You Came For: The smart student's guide to earning a master's or Ph.D.* Revised ed. New York: Farrar, Straus and Giroux; 1997. 413 p. [[Amazon \\$12.](#)] ISBN 0-374-52477-7



# Being an Effective UTCS Graduate Student

## Begin at the End

- Goal: *Research publications*
- Participate in research projects.
- Now. Not “real soon”.
- Do not wait for the perfect research topic.
- Research is a stochastic process, so multiple “trials” of potential projects are essential.
- View classes as input for your research projects.
- Talk and listen: advisor, fellow students, workshops, other researchers, etc.

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