



# CS5127/6027: Requirements Engineering (Fall 2024)

Prof. Nan Niu ([nan.niu@uc.edu](mailto:nan.niu@uc.edu))

Office Hours: 10am-11am, Mondays, Rhodes 832



## Notes

→ The course website is up & running on Canvas

↳ Syllabus as a way to share *interfaces* and at the same time to conceal *implementations*

→ The slides will be made available on the course website, oftentimes *after* each class

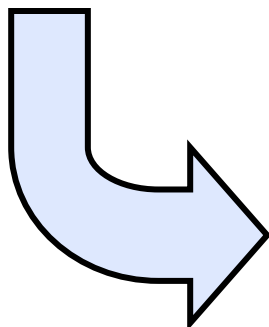
↳ Intention & exception

→ Disclaimer

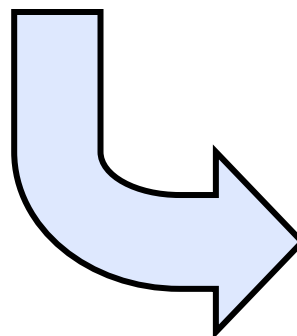
↳ All the images used in the slides are from Google Images (<https://images.google.com/>) unless otherwise specified.

# Today's Menu

Start Here



This Lecture (Monday 8/26)  
Syllabus & Assessments



Next Lecture (Friday 8/30)  
What're req.s?



# About Me

Google

🔍 Nan Niu





# About This Course: Delivery Mode

## → In-person.

↳ Mondays & Fridays: 9:05am-10am, BALDWIN 544

↳ Wednesdays: no lecture, but the students will work individually on the required readings & answer the quizzes

## → Contingency plan (part 1)

↳ In case that I cannot deliver the in-person classes, I'll shift things online & notify everybody

## → Contingency plan (part 2)

↳ In case that you cannot make it to the in-person classes, please study the course materials and/or attend the instructor's office hours.



## About This Course: Prerequisite

- Passed EECE3093C (Software Engineering); or
- Gained practical software development experience.
- Email me ([nan.niu@uc.edu](mailto:nan.niu@uc.edu)) if your situation is special.



# About This Course: Objectives

- Examine the state-of-the-art of research & current practice in RE
  - ↳ Current techniques, notations, methods, processes and tools used in RE
- Gain practical experience in selected RE techniques
- Understand the essential nature of RE
  - ↳ Breadth of skills needed for RE, and the many disciplines on which it draws
  - ↳ Contextual factors & practicalities that affect the success of various approaches to RE
- Gain a basic grounding for research in RE
  - ↳ Methodological issues for RE research
  - ↳ Current research issues & direction of the field
  - ↳ Awareness of the literature



## Assessments (everybody)

→ Both undergraduate and graduate students

↳ 80% Assignments (4 assignments; 20% each)

➤ In-depth understanding, analysis, and write-up

↳ 20% Individual Quizzes

➤ via Canvas; typically due before 11:59pm on each

Wednesday & the typical scope is an assigned reading

→ Graduate students

↳ *Additionally*, an assigned research project (20%)

→ No midterm or final exam





## → Your primary workload includes

- ↳ Complete assignments with detail and significance
- ↳ Make a consistent & sincere effort during all class discussions & activities
- ↳ Improve your writing & analytical skills
- ↳ Take advantage of supplemental & review opportunities

## → Four big rules to live by

- ↳ Be on time with your materials & be ready to work hard
- ↳ Make positive contributions & do your best
  - Stay attentive & participate in YOUR education. Ask questions.
  - Behavior (good or bad) is contagious; spread the right kind.
  - Only your best is good enough. Take pride in the work that you do.
- ↳ Treat others as you want to be treated
  - Listen & respect others' right to their opinions
- ↳ Take responsibility for your actions
  - YOU are responsible for the choices that YOU make.
  - Maintain academic honesty.





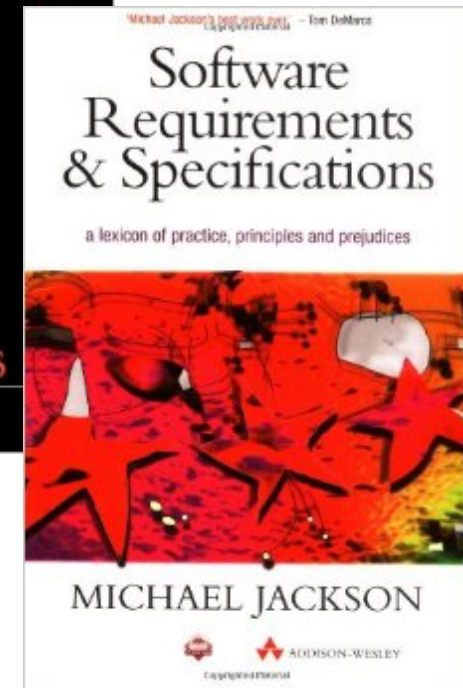
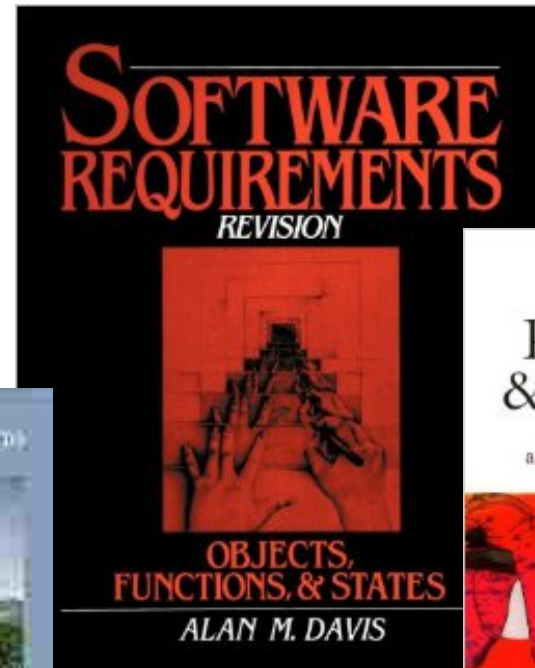
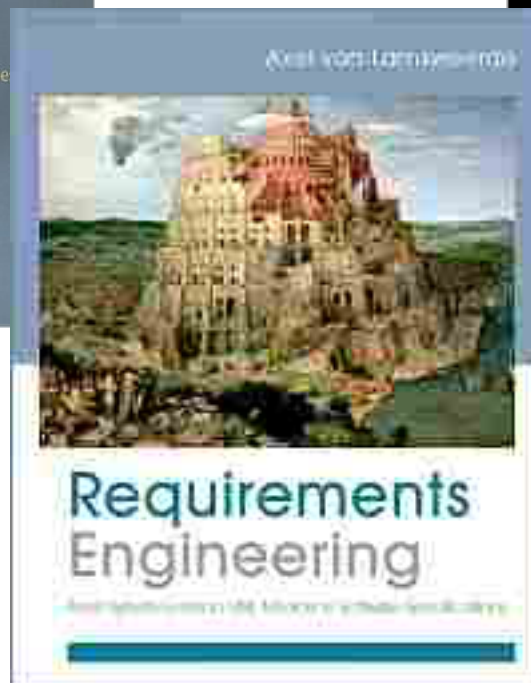
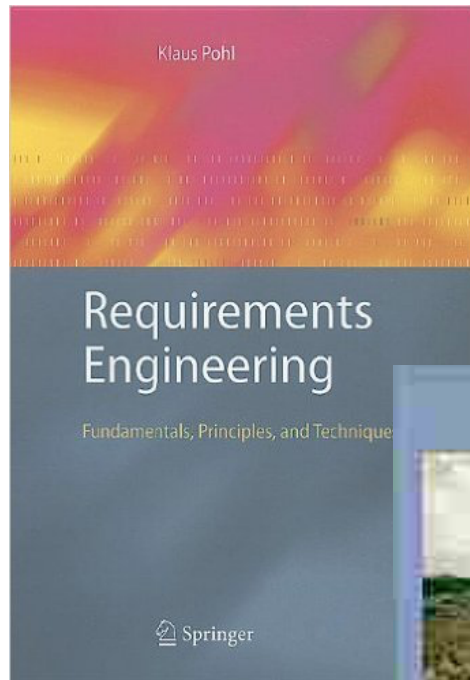
## About Textbook

**No one textbook covers the field well → No required textbook for this course**

↪ Readings will be made available on the course website



# Just because we don't use a textbook...







# Just because we don't use a textbook...



# Research Literature

## Conferences

- ↪ IEEE International Symposium on Requirements Engineering
  - RE'93 - Jan 1993, San Diego, USA
  - RE'95 - Mar 1995, York, UK.
  - ...
  - RE'01 - Aug 2001, Toronto, Canada
- ↪ IEEE International Conference on Requirements Engineering
  - ICRE'94 - Apr 1994. Colorado Springs, USA.
  - ICRE'96 - Apr 1996. Colorado Springs, USA.
  - ...
  - ICRE'00 - Jun 2000, Schaumburg, USA
- ↪ In 2002, ICRE and RE merged...
- ↪ IEEE International Requirements Engineering Conferences
  - RE'02 - Sept 2002, Essen, Germany
  - RE'03 - Sept 2003, Monterey Bay, USA
  - RE'04 - Sept 2004, Kyoto, Japan
  - RE'05 - Sept 2005, Paris, France
  - ...
  - RE'21 - Sept 2021, South Bend, USA
  - RE'22 - Aug 2022, Melbourne, Australia
  - RE'23 - Sept 2023, Hannover, Germany
  - RE'24 - June 2024, Reykjavik, Iceland

## Journals

- ↪ Requirements Engineering Journal
  - published quarterly by Springer
- ↪ IEEE Transactions on Software Engineering
  - (published monthly)
- ↪ ACM Transactions on Software Engineering and Methodology
  - (published quarterly)
- ↪ Various other SE journals:
  - IEEE Software
  - Automated Software Engineering
  - Journal of Systems and Software
  - Information and Software Technology

## Workshops

- ↪ REFSQ - Int. Working Conference on Requirements Engineering: Foundations of Software Quality
- ↪ RE Tracks @ ACMSAC (ACM Symposium on Applied Computing), QUATIC (Int'l Conf. on the Quality of Info. and Comm.s Tech), ...

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- ICRE'94 - Apr 1994, Colorado Springs, USA.
  - ICRE'96 - Apr 1996, ... USA.
  - ...
  - ICRE'...
- <http://requirements-engineering.org>
- RE'01 - Aug 2001, Toronto, Canada
- RE'02 - Oct 2002, ... USA
- RE'03 - ... Japan
- RE'04 - ... Paris, France
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# Journals

- 
- Requirements Engineering  
 published quarterly  
 IEEE Transactions on  
 Engineering  
 link  
s-engineering.org  
 website  
 Software Engineering  
 Journal of Systems and Software  
 Information and Software Technology

## Workshops

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➤ ICRE'96 - Apr 1996, ... USA.  
➤ ...  
➤ ICRE'

**RE portal link**  
**<http://requirements-engineering.org>**  
**on course website**

➤ ... Software Engineering  
➤ ... Journal of Systems and Software  
➤ ... Information and Software Technology

**Workshops**  
➤ REFSQ - Int. Working Conference on Requirements Engineering: Foundations



# Final Letter Grade (everybody)

→ On the 100-point scale

A [92, 100]

A- [88, 92)

B+ [84, 88)

B [80, 84)

B- [76, 80)

C+ [72, 76)

C [68, 72)

C- [64, 68)

D+ [60, 64)

D [56, 60)

D- [52, 56)

F [0, 52)







## Today's Take-Aways

→ Course modes: (1) Monday & Friday; (2) Wednesday

→ Assessments: (1) Undergrads; (2) Grads

### → To-do

↪ Review today's slides & understand the syllabus

↪ Read the "RE: A Roadmap" paper

↪ Complete Quiz1 before 11:59pm, Wednesday (8/28)

↪ Attend the lecture: "What're requirements?" on Friday (8/30)