CMPS 7010 – Fall 19

PhD & TA Orientation

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CS PhD at Tulane

- New PhD program with 13 students so far.

- CS PhD program policies:
  http://www2.tulane.edu/sse/cs/academics/graduate/

- Tulane and SSE policies:
  https://ogps.tulane.edu

- Your class grades need to be B or higher.

- Work with your advisor on research. Start now, do literature search, get familiar with the topic. It can take a year to identify a research direction that is feasible to make progress on.

- Contact me for any other questions (PhD milestones, course transfers, …)

PhD Curriculum

1 Classes

The following set of classes comprises 48 credit hours (16 classes).

- **Core Computer Science Courses (9 credit hours):**
  CMPS 6610 Algorithms (fall 18)
  CMPS 6760 Distributed Systems (spring 19)
  CMPS 6620 Machine Leaning (spring 20)

  3.5 GPA required

- **Research Courses (9 credit hours):**
  CMPS 7010 Research Seminar (fall 18)
  CMPS 7020 Research in Computer Science (spring 19)
  CMPS 7020 Research in Computer Science (spring 20)

  Years 1 & 2

- **Interdisciplinary Project (9 credit hours):**
  Graduate CMPS elective, TBD (spring 20)
  Graduate non-CMPS elective, TBD (fall 19)
  CMPS 7020 Research in Computer Science (fall 19)

  Year 2

- **Computer Science Electives (9 credit hours):**
  CMPS 6350 Introduction to Computer Graphics (fall 18)
  Graduate CMPS elective, TBD (spring 19)
  Graduate CMPS elective, TBD (fall 19)

- **General Electives (12 credit hours):**
  CMPS 7020 Research in Computer Science (fall 20)
  CMPS 7020 Research in Computer Science (fall 20)
  CMPS 7020 Research in Computer Science (fall 20)
  CMPS 7020 Research in Computer Science (spring 21)

- **English Classes (4 credit hours):**
  SCEN 7650 ESL: Speaking Skills (fall 18)
  SCEN 7660 ESL Writing Skills (spring 19)

  International students only

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PhD Curriculum

2 Timeline

Total number of classes: 18

	Fall 18 (4)	Spring 19 (4)
Year 1	CMPS 6610 Algorithms	CMPS 6760 Distributed Systems
	CMPS 7010 Research Seminar	CMPS 7020 Research in Computer Science
	CMPS 6350 Introduction to Computer Graphics	Graduate CMPS elective, TBD
	SCEN 7650 ESL: Speaking Skills	SCEN 7660 ESL Writing Skills
	Fall 19 (3)	Spring 20 (3)
Year 2	Graduate non-CMPS elective, TBD	CMPS 6620 Machine Leaning
	CMPS 7020 Research in Computer Science	CMPS 7020 Research in Computer Science
	Graduate CMPS elective, TBD	Graduate CMPS elective, TBD
Interdisciplinary presentation (spring 20)		
Qualifying exam (fall 20)		
	Fall 20 (3)	Spring 21 (1)
Year 3	CMPS 7020 Research in Computer Science	CMPS 7020 Research in Computer Science
	CMPS 7020 Research in Computer Science	CMPS 9990 Dissertation Research
	CMPS 7020 Research in Computer Science	
Prospectus		
	Fall 21 (0)	Spring 22 (0)
Year 4	CMPS 9990 Dissertation Research	CMPS 9990 Dissertation Research
	Fall 22 (0)	Spring 23 (0)
Year 5	CMPS 9990 Dissertation Research	CMPS 9990 Dissertation Research
Dissertation and Defense		

Milestones
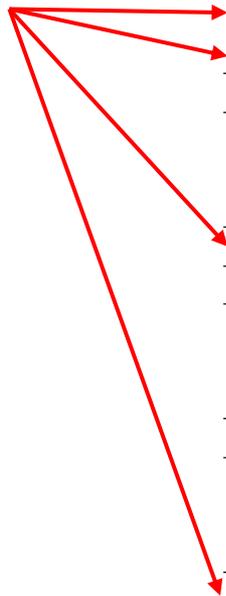
Classes to Enroll In

- Full-time enrollment is 9 credit hours (usually 3 classes) per semester.

- International students cannot take fewer classes.

- Only enroll in classes that count towards the PhD program. You can take more classes as long as they are considered to be part of your PhD program. [Check with your advisor and with me.]

- Not all graduate CMPS classes count towards CS PhD. Only classes marked with * here: http://www2.tulane.edu/sse/cs/academics/graduate/graduate-courses.cfm

- Your class grades need to be B or higher.

- You have a tuition waiver, but you have to pay fees and your portion of the health insurance.

TAs and RAs

- PhD students in our program are either teaching assistants (TAs) or research assistants (RAs).

- RAs are supported by research grants from their advisor.

- TAs usually support class instructors by teaching lab sessions, grading, etc.

- Later in the program, TAs might teach classes themselves. This experience may be useful when pursuing a career in academia.

- Both as a TA or RA you are a university employee who has to uphold standards of integrity and perform assigned duties. Contact me for any questions.

TA Responsibilities

TA Responsibilities

- Know what the instructor has covered in the classes leading up to your lab section.

- Bring examples that will help students understand the material better.

- Be ready to present additional examples and/or supplementary material based on student questions.

TA Expectations

- Be well prepared for your lab. TAs are role models to students.

- TAs are expected to dress and behave professionally.

- You are required to hold each lab session in its full length and may not let the class go early.

- The grading of exams is typically done in collaboration between TAs and the instructor.

Efficiency and Effectiveness

- Do things that scale

- Automate routine work

- Keep future in mind = keep notes, develop teaching portfolio

- Not every question needs an answer

- You have the right and the responsibility to enforce course rules

- Take good care of yourself, keep balance between two roles (educating yourself and helping educate others)

Consistent Grading

- Grade a few works in pencil before starting "real" grading

- When stuck, move on and revisit

- Grade in one sitting, consistency is the key, be prepared to defend your decisions, don't sweat 1%.

- When in doubt consult the instructor.

Helpful Feedback

- Help students learn instead of penalizing them
- Correct and deduct points for all mistakes but give written feedback for top-3 issues
- Avoid deducting points without explanation
- Criticize work, not the person, avoid "you"
- **Give positive feedback**

Own Your Work And Be a Colleague

- Propose your solutions to problems (instead of asking for solutions)

- Arrange for absence

- Communicate frequently with your course instructor and advisor, keep them informed

- Conflict/bullying - involve instructor

- Know student support resources

- Ideas, initiatives, connections, projects - bring them up

As a Tulane Employee

- Protect students' personal information, including grades (FERPA)

- Students' work belongs to them

- Avoid close personal relationships with people you grade or tutor for pay.

- Do not accept gifts.

- Watch for Honor Code violations, report violations to the course instructor

- Watch for students in distress, report students in trouble to course instructor

Research

Research

- Required to complete your PhD.

- Work with your advisor on research.

- RA:

  - Funded by an external research grant from your advisor (e.g., from the National Science Foundation).

  - Research has to fit under the scope of the grant.

- The Research Seminar will introduce you to methods for conducting research in computer science (literature search; reading, writing, and presenting papers).

Miscellaneous

CMPS 7010 Research Seminar

Full-Time Enrollment & International Students

- Every semester (fall, spring, summer), international students have to be enrolled **full-time**:

  - Usually in fall and spring semesters: 9 credit hours (usually 3 classes).

  - In summers, and later in the PhD program: One section of Dissertation Research.

- If you are not enrolled full-time, you accumulate "days of unlawful presence in the US". (180 days = don't enter US for 3-10 years)

Announcements

- Consider attending the interdisciplinary project presentations (TBA)

- CS colloquiums are usually Mondays at 3pm in ST 302. Check department webpage. You should get announcements from the CS listserv.