Survival Guide for Cognitive Science Students

METU Informatics Institute **September 28, 2017** **v3.0**

1. This guide is *not* a substitute for METU student handbook or YOK regulations. Please get to know your official guide. Also check the official cogsci requirements document, available at our web site. In case of conflict, they override this guide. This guide is meant to point out some cogsci-specific requirements, common patterns we have observed through the years, and to give some pointers to current and potential students.
2. COGS501/502/503 must be taken at the earliest opportunity if you don't currently hold a degree in Cognitive Science; they cannot be delayed. If you cannot take all of them in your first term, think again about studying cognitive science here. We have seen serious problems in theses and cogsci-awareness of students who could not fulfill this requirement. In fact, now we ask explicitly in interviews that you take them at their first offering.
3. If you only do course readings, you won't learn much. Try follow-ups, read our trade journals and well-known cogsci sources (textbooks, top one hundred, handbook, readings in cogsci etc.). Remember: you have one year in MS and two years in PhD to start doing high-quality thesis research in a field in which you probably have no prior experience. Some intense training and deliberation in the first two years are to be expected. If you work, and your work won't allow you to concentrate, at least in the first year, think again before applying to cogsci. Not attending 501/502/503 at the earliest offering is the surest and quickest exit from the department.
4. MS students must register to 599 latest at the end of 1st term. PhD students must register to 699 latest by the end of 2nd term. This means you have to have an idea about thesis topic by the end of first term (for ms) or first year (for phd).
5. According to university-wide rules, 590 must be taken at 2nd term, and 690 at 3rd term. This is when you first present a draft proposal for thesis at the end of the term (ms), or some research you have done in preparation for thesis (phd).
6. *Before* the beginning of 2nd term for MS, and 3rd term for PhD, you must put a thesis abstract online pending approval by your advisors. This can be changed later. If you don't do this, you won't be able to take new courses.
7. Putting the items above together, it is best to start thinking about thesis topic before the end of your first term here.
8. Depending on the performance of the student, the advisor gives a grade at the end of the semester, for 599/699. This grade is either S (satisfactory), P (progress) or U (unsatisfactory). In case you get two U grades in two consecutive semesters, or three U grades in total for thesis work, you are dismissed from the program.
9. Suggested road map for 590/690: attend them all the time whether registered or not, which is the fastest way to make up for lack of background or perspectives on cogci. Register only once. Present your thesis proposal (ms), or some of your research (phd). PhD students will have ample time to make an official thesis proposal after the qualifier. But it never hurts to start thinking early about dissertation research, in fact, highly recommended.
10. PhD students cannot take 3xx or 4xx courses for graduate credit.
11. Restricted courses for both MS and PhD Students, one from each 4 area of the COGS courses, are meant to expose you to some core topics in cogsci.
12. PhD students: All PhD students are required to submit a journal paper about their dissertation before they defend. The submission must be considered worthy of consideration for publication by your advisor. The journal must be relevant to your phd research. Please consider this as an opportunity to excel in doing and presenting high-level research, and preparing for world-wide contributions.

13. PhD Students: You can't escape from philosophy if you're doing cognitive science. The qualifying exam is structured such that everyone attempts a philosophy question, then 5 other questions from an overlapping aspect, currently in language, computing and psychology. The exam guide has more details.
14. MS students must defend their thesis by the end of 6th term even if it's not completed, in which case you'll petition for an extension. For Phd students, this is the 12th term.
15. There is no exemption from 501/503.
16. Usually, only computer science and computer engineering graduates can be exempted from 502, assuming they know logic. Otherwise they need to take it. (simple test for all students: if you don't know python, propositional logic, first order logic or lambda calculus, take the course. If you know three out of four *including* programming, you may skip it.).
17. If a course you've taken before counted toward some degree, we cannot count it toward your cogsci course load even if it's relevant. The best that might happen, pending department's approval, is asking you to take another course if you've taken the equivalent of one of ours.
18. 501/502 are not meant to turn everyone to linguists, logicians or programmers. These are math tools to study formal structures scientifically. We all need them.
19. If you are going to do experiments, 536 is an unofficial prerequisite. Take it at earliest possibility to learn your stats.
20. Departmental seminars are ALWAYS required. You register to them only once (when you make a presentation), but attendance is always required. This is a grad school. More importantly, discussion is where you learn cogsci.
21. Keep your friday lunches open; that's for the seminars, usually between 12.30–14.00.
22. If you find a relevant course which is not in our list, we might consider including it. Send us the syllabus.
23. If you have a degree in cogsci, you might be exempt from 501/502/503 during PhD if you've taken them (or their equivalent) already. You don't have to take other courses in their stead.
24. If you are exempt from a course, that would not change your course load. It means you'll take an elective or what is agreed with you and your advisor. This is important because the registrar won't let you graduate with less than the official course load.

    If you've taken one of our courses *before* you joined cogsci as a student, and did not count it toward a degree, say as a special student, that's different and it may indeed reduce your course load.

    If you've taken one of our courses earlier in another degree program and it counted toward your degree, the first rule applies: you take another course instead, pending advisor approval.
25. If a COGS course appears full when you try to register, please talk to the lecturer about this. Our courses are open to some other departments, but COGS students have priority. You won't be left out if the physical capacity of the room is good enough for first-come-first-served COGS students.
26. Finding a thesis topic in a new area isn't easy. Start early, and try to narrow down your questions as you go. Talk to people.
27. Contra popular belief, mind is not what only brains can do. Human mind is probably what only human brains can do, but we're not even sure of that. The brain is one way to realize a mind, and surely the best one we know of today. Of course we study brains, but there's more to cogsci than that. If this were not true, we would be in medical school, and Alan Turing would be just a computer guy.
28. Cogsci is not only interdisciplinary and multidisciplinary, it is also metadisciplinary. Sticking to your disciplinary roots turns out to be counterproductive if that's what you're thinking. Bring your expertise to cogsci, but don't stop there, since you could also do that in the field you came from.
29. This is a field with a specialized body of knowledge. Try not to take popular books on mind and brain too seriously. Unfortunately, the field is susceptible to grandiose, free theorizing and hocus-pocus, and we suggest you refrain from that. We recommend waiting for the Nobel Prize, Rumelhart Prize, Fields Medal, Turing award, Jean Nicod Prize, having dinner with Jerry Fodor, etc. etc.
30. You came to us to become a cognitive scientist. Remember that without a BSc in cogsci it'll take extra effort on your part. No pain no gain.