Graduate Curriculum

Program in Cognition and Development

August, 2005

PROGRAM GOALS

The graduate curriculum in Cognition and Development aims to achieve the following goals:

1. Introduce the general issues that frame research on cognition, as well as the history behind these issues.

2. Instill an interdisciplinary appreciation of basic issues from the perspectives of developmental psychology, cognitive psychology, cognitive neuroscience, and computational modeling. Also draw on additional perspectives when relevant, including anthropology, linguistics, philosophy, etc.

3. Introduce state-of-the-art methodological techniques for shedding light on basic issues, drawing on methods from a wide variety of disciplines in cognitive science and neuroscience.

4. Cover state-of-the-art research findings in the Program's five research concentrations: memory, concepts, perceptual cognition, language, and emotion.

5. Develop professional abilities, including critical analysis, synthesis, writing, and presentation.

6. Instill a sense of community within the Program and also within the Department, as opposed to an isolated lab-based culture.

7. Provide frequent forums for discussion of issues, research, and literature, incorporating researchers from other universities, as well as from the Program and from the larger Emory community.

8. Maintain a primary emphasis on developing research skills and research programs, rather than on pursuing course work as an end in itself.

PROGRAM REQUIREMENTS

13 Seminars / Courses

       5 core seminars from the Cognition and Development Program

1 statistics course
1 methodology course in an area related to the student's research
1 history course
1 teaching practicum
2 breadth courses outside the Program, either in Psychology or another department
2 reading seminars in the Cognition and Development Program

Note that all courses should be approved by the student's primary advisor.

Teaching Requirements

Participate in Teaching Assistant Training and Teaching Opportunity (TATTO)
TA undergraduate statistics once
Teach a section of undergraduate methods once

Note that additional TAing and summer teaching positions may also be available.

Other Requirements

Give a research presentation at the end of each year to the Program
Complete a masters thesis by the Department deadline
Pass the qualifying exam by the Department deadline
Defend a dissertation proposal in Year 4

Recommended
Seminar on professional issues

CORE SEMINARS IN COGNITION AND DEVELOPMENT

We are of the opinion that broad proseminars on entire fields try to cover too much ground (e.g., proseminars on cognitive psychology, developmental psychology, cognitive neuroscience). In such seminars, so many areas must be covered that justice is done to none. Furthermore, there is too little time to discuss history, major issues, interdisciplinary approaches, and methodology. We have found that students come away from these seminars with fragmented impressions of the field, with gaping holes in they what they know, and with little depth on important issues.

Our approach is to offer a much more focused sequence of five core seminars, each covering one of the Program's 5 research foci:

Memory
Concepts
Perceptual Cognition
Language
Emotion

All core seminars include the following topics:

> Historical background
> Long-standing issues and classic findings
> Interdisciplinary perspectives
> Theories
> Methodologies
> Empirical findings

The first few weeks of each seminar focuses on history, issues, and inter-disciplinary perspectives. In the remaining weeks, central areas of research are covered, addressing state-of-the-art theories, methodologies, and research findings from a variety of disciplines, including, at a minimum:

> developmental psychology
> cognitive psychology
> cognitive neuroscience
> computational modeling

Each core seminar is team taught by at least two faculty in the Program, including at least one whose work spans adult cognition and one who works on cognitive development. All faculty teaching a core seminar will typically be present at all seminar meetings when in town. Typically, students and faculty read assigned materials, with individual members leading discussions on them. A set of optional background readings will be developed for each seminar from each of the disciplines to be covered (e.g., developmental psychology, cognitive psychology, cognitive neuroscience, computational modeling). Students who lack background in any of these areas can use whatever optional readings they need to acquire basic concepts and techniques necessary to following the seminar readings. Seminar participants may receive assignments to keep diaries on the readings, to generate questions for discussion, and so forth.

Evaluation will typically involve either short written assignments performed regularly or longer written assignments designed to provide practice for the qualifying exam. These assignments may vary, but typically they will require analysis, integration, and creativity--not rote memory. In general, students will be asked to demonstrate that they understand the broad issues in the area, and that they can bring findings and theories from a variety of disciplines to bear on these issues effectively.

To fulfill the core seminar requirement, every student in the Program is required to take each core seminar offered during their first three years.

READING SEMINARS

The Program regularly offers reading seminars in interdisciplinary areas of research that are of interest to faculty and students. Often these seminars are team taught by faculty sharing common interests. When possible, at least one instructor comes from cognition, and another comes developmental. Students are encouraged to take these seminars pass-fail. Once students have satisfied all of their course requirements, they are encouraged to continue participating in the reading seminars, thereby increasing their exposure to state-of-the-art research areas.

Besides including standard seminar meetings, each reading seminar often includes visits from one or two outside speakers from other universities. Typically, these visitors are researchers performing state-of-the-art research on the seminar topic. Students have the opportunity to interact extensively with these visitors both in and outside the classroom, thereby establishing professional contacts, ideally with people close to their research interests.

PROFESSIONAL ISSUES

Every other year, two faculty in the Program offer the graduate seminar on professional issues. Students may only enroll in this seminar during their second or third year. Topics may include:

> submission and revision of journal articles
> reviewing journal articles
> preparing abstracts of varying lengths
> making professional presentations at conferences
> preparing a CV
> preparing a website
> interacting with other researchers in a research area
> applying for jobs and post docs
> preparing grant proposals

RESEARCH GROUPS

All students are expected to participate in at least one research group each semester. These groups involve weekly meetings of faculty, students and post-docs who shar a common interest in a particular topic or set of issues. Research group meetings involve discussing readings and/or current research projects of group members or visitors. Faculty and students from outside the C&D program and outside the department often attend. Research group topics may shift according to student and faculty interest. Current research groups include the Language Group, the fMRI Group, and the Memory, Narrative and Coping Group.

RESEARCH COURSES

All students must sign up for at least 12 credits each semester (students may sign up for more than 12 credits if necessary or desired). If the courses that a student is taking do not add up to 12 credits, he or she must sign up for a research course. The number of credits for a research course is variable. At least enough credits must be taken to reach the 12 credit minimum. However, a student may want to sign up for more credits to reflect the amount of research being performed.

The research course that a student signs up for depends on his or her status. All first-year students must sign up for Psychology 597 both semesters, and they must take it for a grade, even if they begin working on their masters. Second- and third-year students who are working on their masters must sign up for Psychology 599, and they may take it pass-fail. Second- and third-year students who already have masters should continue taking Psychology 597, but they may now take it pass-fail. Once students complete their masters, and assuming that they are in advanced standing (completion of 24 credits), they should sign up for Psychology 797, as long as they have not begun their dissertation. Once dissertation work has begun, students should sign up for Psychology 799. Students may take both Psychology 797 and 799 pass-fail.

TAKING COURSES PASS-FAIL

All first-year students must take all their courses for a grade, including Psychology 597. Thereafter, all students must take the core seminars for grades, and also the courses that satisfy the methodology requirement and the history requirement. Students may take courses that satisfy the breadth requirement and the reading seminar requirement pass-fail, as long as the instructors of these courses agree.

YEAR-END RESEARCH PRESENTATIONS

At the end of each academic year, all faculty and students in the Program meet for a full day to hear presentations from students, an event affectionately known as the "Research Festival". Every student, from the first year on, is required to make a 10 minute presentation of his/her research during the past year, with 5 additional minutes for questions. If first-year students have not collected data yet, they can present their plans for research during the second year. A social event follows the presentations at the end of the day

COLLOQUIA AND THE COGNITION AND DEVELOPMENT RESEARCH SEMINAR

Over the course of the year, the Department sponsors a series of Department-wide colloquia, held approximately every other week. About half of these speakers are invited from outside the university and half are faculty from within the department. All students are expected to attend these colloquia regularly throughout their tenure in the Department. Students are not

only expected to attend colloquia sponsored by the Cognition and Development Program, they are expected to attend colloquia sponsored by the other Programs as well.

All students are also required to register for the Cognition and Development Research Seminar every semester throughout their tenure in the Department, and they are expected to attend its meetings held on the off weeks from departmental colloquia. Students are also encouraged to attend meetings of the weekly Psychobiology and Clinical programs.

ADVISORS AND LAB MEETINGS

All students are required to have an advisor, and to attend the lab meetings of their advisor regularly. All lab meetings are open to any student in the Program. The times and locations of all lab meetings will be publicized regularly, and students are encouraged to attend the lab meetings of other faculty besides those of their advisors. Students are encouraged to become involved in the research of multiple labs if they wish, as long as it does not interfere with their primary responsibilities.

SUMMER ACTIVITIES

All students are expected to continue their research activity during the summer months. Of course, vacations and conference trips are encouraged as well. Students may also wish to participate in informal summer reading groups.

RECOMMENDED SCHEDULE FOR COMPLETING REQUIREMENTS

The schedule to follow is based on the following three assumptions:

1. Research is the primary activity in which students should be engaged.
2. A student should never take more than two major courses/seminars at a time.
3. A student should only take one major course/seminar at a time in the fourth year.

We recommend that students follow the schedule below in completing their graduate requirements. We recognize, however, that individual students differ, and that circumstances beyond anyone's control arise. Thus, reasonable flexibility in achieving the requirements is honored, as long as satisfactory and timely progress towards completion is maintained. In the schedule below, "[open slot]" refers to a slot in which a student could take a reading seminar, a breadth course, the history course, or professional issues.

The specific schedule shown here is for students who arrive when the core seminar cycle begins. Students who arrive in the second and third years of the cycle would have slightly different schedules, depending on whether the year containing only one core seminar falls in their first or second year. Note that students need not start the core seminar cycle at its

beginning; entering the cycle at any point works fine. Again, students must take every core seminar offered during their first three years.

Finally, in the recommended schedule below, we include our recommendations for performing the masters thesis, the qualifying exam, and the dissertation. Note that our recommendations are earlier than the deadlines set by the Department. For those deadlines, see the appropriate Department regulations.

Year 1, Fall
  Core Seminar #1
  Statistics

Year 1, Spring
  Core Seminar #2
  [open slot]
  Propose masters thesis
  Program research presentation

Year 2, Fall
  Core Seminar #3
  Methodology course
  TA undergraduate statistics (or Year 2, spring)

Year 2, Spring
  Core Seminar #4
  [open slot]
  Defend masters thesis

Year 3, Fall
  Core Seminar #5
  [open slot]
  Propose qualifying exam
  Teach undergraduate methods section (or Year 3, spring)

Year 3, Spring
  [open slot]
  [open slot]
  Defend qualifying exam

Year 4, Fall
  [open slot]
  Propose dissertation

Year 4, Spring
  [open slot]