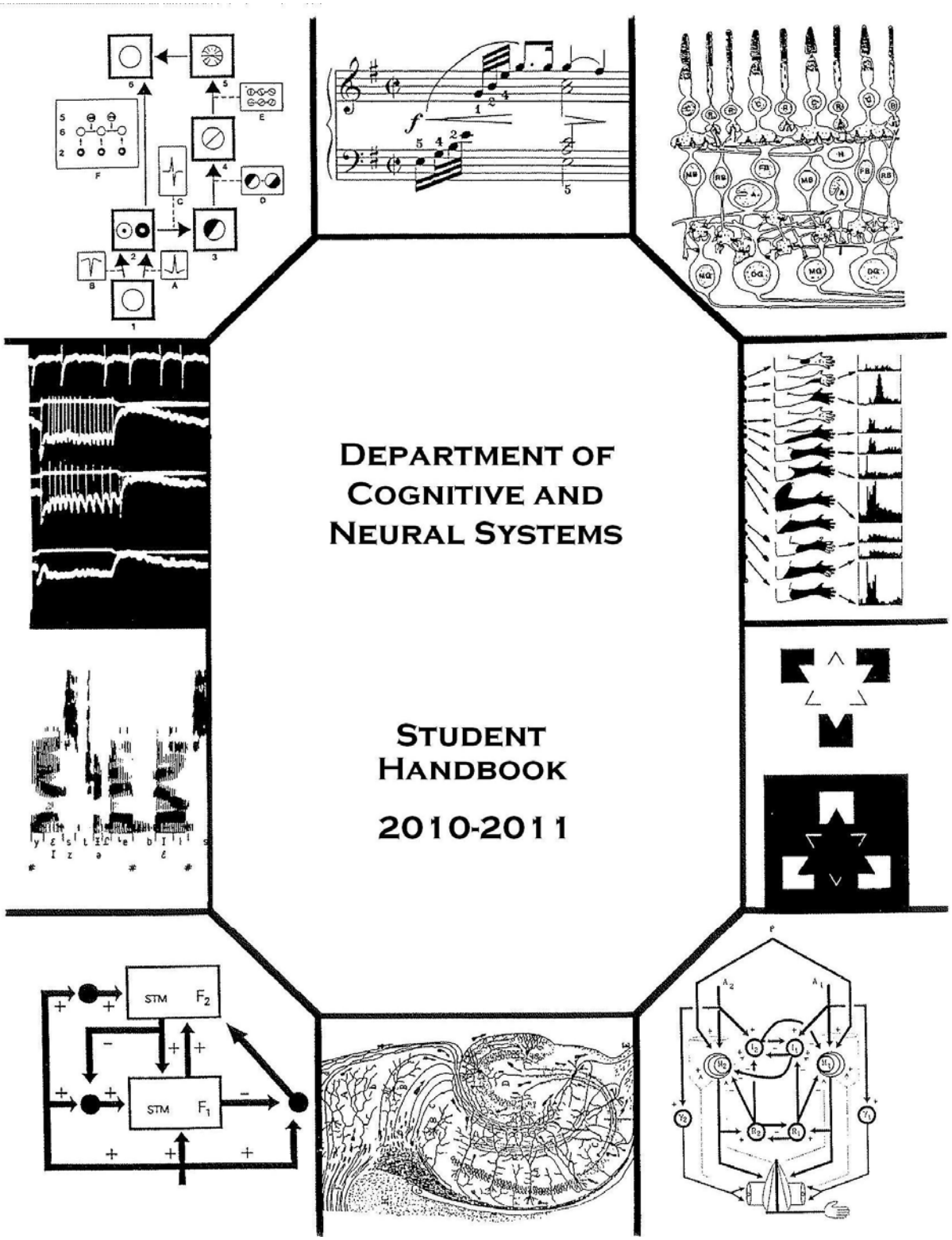

Department of Cognitive and Neural Systems

Student Handbook

2010-2011

Student Handbook

Department of Cognitive & Neural Systems

Welcome to all new CNS students, and welcome back to everyone else. We are looking forward to another productive year with you.

On the following pages you will find a variety of information about the CNS Department. Please take some time to review all these pages carefully. This handbook assembles important communications in one place. It does not, however, duplicate all information contained in the Graduate School (GRS) Bulletin (http://www.bu.edu/bulletins/grs/), the CNS Brochure (http://www.cns.bu.edu), or the University Class Schedule (http://www.bu.edu/reg/), which you should consult as well.

Please note that several forms are included, which need to be completed and returned now or later in the year. You may find it convenient to keep the completed forms in this book, for your records, and to turn in photocopies.

Best wishes for a good year.

The CNS Faculty and Staff

Student Handbook
Department of Cognitive & Neural Systems

Table of Contents

CNS Office (Room 201, 677 Beacon Street)

Carol Jefferson and Robin Amos in the CNS office can help you with questions about registration and other CNS and University matters. The CNS telephone number is: (617) 353-9481; FAX (617) 353-7755.

The department mailing address is:

> Department of Cognitive and Neural Systems, Boston University
> 677 Beacon Street, Room 201, Boston, MA 02215

All mail sent to you at CNS should be addressed accordingly.

		Office	Email	Phone
Instructors	Dan Bullock	214	danb	3-9486
	Gail Carpenter	303	gail	3-9483
	Mike Cohen	212	mikec	3-9484
	Anatoli Gorchetchnikov	213	anatoli	-
	Steve Grossberg	205	steve	3-7858
	Frank Guenther	309	guenther	3-5765
	Ennio Mingolla	210	ennio	3-9485
	Eric Schwartz	310	eric	3-6179
	Barb Shinn-Cunningham	311	shinn	3-5764
	Max Versace	308C	versace	3-6174
	Arash Yazdanbakhsh	213	yazdan	-
Staff	Robin Amos	201	ramos	3-9481
	Brian Bowlby	211	bowlby	3-7673
	Cindy Bradford	203A	cindy	3-7670
	Carol Jefferson	201A	caroly	3-7676
	Megan Johnson	203	mvj	3-7857
	Chris Laskey	209	laskey	3-4385

Other CAS/CNS Faculty and Staff

See page [23] for a listing of additional CAS/CNS faculty and staff.

CNS Teaching Fellows

FALL 2010

Course	TF Name	Email	Office
CN360	Omar Zeid	siromar	108
CN510	Sara Saperstein	saperste	108
CN560/ BE509	Wei Guo	weiguo	110
CN580	Nan Jia	jian	107

SPRING 2011

Course	TF Name	Email	Office
CN210/ NE204	Ben Clark	bjc	112
CN530	Oliver Layton	owl	108
CN570	Eric Denovellis	edeno	110

FALL 2010 ORIENTATION AND REGISTRATION MEETING FOR NEW STUDENTS

All new students are expected to attend this meeting:

Orientation and Registration Meeting for New Students

Wednesday, September 1, 2010, 10:30AM, Room 313

The Orientation and Registration Meeting is organized by the Director of Graduate Studies, Professor Shinn-Cunningham, for all new students entering CNS in the fall of 2010 and all CNS faculty members. This meeting is intended to both provide new students with valuable information and present an opportunity for faculty and students to get acquainted. Students will be presented with an overview of curriculum and degree requirements and will be advised for course selections. For those students who have not yet met individually with their advisors, they will have the opportunity to do so following this meeting. Refreshments will be served.

CNS Faculty Advisors

Name	CNS office	CNS email
Daniel Bullock	**214**	**danb**
Gail Carpenter	**303**	**gail**
Michael Cohen	**212**	**mike1947 at gmail.com**
Stephen Grossberg	**205**	**steve**
Frank Guenther	**309**	**guenther**
Ennio Mingolla	**210**	**ennio**
Eric Schwartz	**310**	**eric**
Barbara Shinn-Cunningham	**311**	**shinn**

The official role of your advisor is to meet with you during each registration period, to discuss your program of study, and to sign your registration form. You should regularly consult your advisor regarding course selection and timing, particularly if your schedule includes courses outside the CNS program; timing and preparation for the MA or PhD exams; and research and career plans. Of course, you are always welcome to discuss your program with any professor.

Initial assignments of students to advisors are somewhat arbitrary. If you are, or will soon be, doing research with a professor, that person is probably your advisor. As a PhD student starts doing thesis research, the thesis advisor will become the CNS faculty advisor.

If you wish to request a change to a new advisor, please send email to Barbara Shinn-Cunningham (shinn@bu.edu, cc: caroly@bu.edu).

CNS Course Requirements

PhD - post-master's

8 CNS courses (32 credits), with at least 2 courses at the 700- or 800-level

PhD - post-bachelor's

16 courses (64 credits), of which at least 10 are CNS, with at least 2 of the CNS courses at the 700- or 800-level

MA

8 courses (32 credits), of which at least 6 are CNS

BA/MA

40 courses (160 credits):

8 graduate-level courses (32 credits), of which at least 6 are CNS, for the MA in CNS

In addition to -

32 courses (128 credits) required for the BA in major undergraduate department, as specified in the *Undergraduate Bulletin.*

Note: To be counted towards graduation requirements, courses must be completed satisfactorily, with a grade of B- or above.

Also note: Although no specific CNS courses are designated as required, you will need to plan your program carefully in order to prepare for the MA or PhD exam. In particular, PhD exam preparation requires a student to take at least 5 of the 6 CNS courses: 530, 540, 550, 560, 570, and 580. Please see pages [36-38] for further details.

CNS Course Schedule 2010–2011

Semester I: Fall 2010			
CAS CN/NE360 SAR HS361	Computational Models of Hearing	J. Bohland (TF Omar Zeid)	T/R 11:00-12:30 W 12:00-1:00
CAS CN510	Principles and methods of cognitive and neural modeling I [Neural Models I]	A. Gorchetchnikov (TF Sara Saperstein)	M 5:00-8:00 CNS B03
CAS CN560 /ENG BE509	Neural and computational models of speech perceptio and production [Speech Models]	B. Shinn-Cunningham (TF Wei Guo)	T/R 10:00-11:30 CNS B03 Lab: W 9:00-10:00
CAS CN580	Introduction to computational neuroscience [Neurosci Intro]	E. Schwartz (TF Nan Jia)	W 1:00-4:00 CNS B03
GRS CN760	Topics in speech perception and recognition [Speech Models II]	M. Cohen	R 5:00-8:00 CNS B03
GRS CN810	Topics in CNS: Adaptive Mobile Robotics	M. Versace	M 11:00-12:30 CNS B03 Lab: W 4:30-8:30 (308)

Semester II: Spring 2011			
CAS CN210 /NE204	Introduction to Computational Models of Brain and Behavior [Intro Model Brain]	F. Guenther (TFs Ben Clark; TBA)	T/R 11:00-12:30 F 8:00; 9:00; 10:00; 11:00; 12:00
CAS CN530	Neural and computational models of vision [Vision Models]	A. Yazdanbakhsh (TF Oliver Layton)	M 1:00-4:00 CNS B03
CAS CN540	Neural and computational models of adaptive movement and planning control [Movement Models]	D. Bullock	W 1:00-4:00 CNS B03
CAS CN550	Neural and computational models of recognition, memory, and attention [Memory Models]	H. Ames A. Gorchetchnikov	M 5:00-8:00 CNS B03
CAS CN570	Neural and computational models of conditioning, reinforcement, motivation and rhythm [Learning Mode	C. Tan (TF Eric Denovellis)	R 5:00-8:00 CNS B03
GRS CN700	Computational and mathematical methods in neural modeling [Neurl Model Meths]	M. Cohen	T/R 11:00-12:30 CNS B03
GRS CN730	Models of visual perception [Vision Models II]	E. Mingolla A. Yazdanbakhsh	R 1:00-4:00 CNS B03
GRS CN780	Topics in computational neuroscience [Comput Neurosci]	E. Schwartz	T 1:00-4:00 CNS B03

Directed Research Courses

CNS students who will be engaged in research projects during a given semester may be eligible to register for one or more of the Directed Research courses listed on the following page.

Please consult your faculty research supervisor about course titles, section codes and number of credit hours. All new Directed Research sections need to be set up by Carol (Room 201A).

Odd course numbers are used for the fall semester (911, 915...), and even numbers are used for the spring semester (912, 916...).

Normally, directed research courses cannot be used to fulfill MA or PhD course requirements. Exceptions are sometimes made—for example, when a student wishes to study a topic not included in current course offerings in other departments. To use a directed research or reading course to fulfill a CNS requirement, you must obtain written permission **before the start of the semester** during which the course will be taken. If you wish to petition for such an exception, please write a letter to Director of Graduate Studies, Professor Barbara Shinn-Cunningham, specifying the course name and number, the number of credits, the name and department of the faculty supervisor, a brief description of work to be carried out for course credit, and a justification for the exception. Please give a copy of your approved petition to Carol for your CNS file.

Full-Time Certification and Continuing Student Status (Full-Time and Part-Time)

The list on the following page also includes CNS course numbers for Certified Full-Time Study (certification as a full-time student when registered for less than 12 credits) and for full-time and part-time Continuing Student Status registration. If you need to register for one of these designations, please follow instructions as indicated in your registration package. There is a particular form required for each action.

If you have completed your course requirements, you must register for Continuing Student Status in order to comply with the GRS residency requirements, as well as to have access to computer systems, office space, libraries, parking, thesis research supervision, exam and graduation registration, etc.

Teaching Course (GRS CN699)

Teaching Fellows are required to register for the teaching fellow course GRS CN699 during the term of their teaching fellow assignment. Registration must be for the section of the course that corresponds to the faculty instructor of the course to which the Teaching Fellow has been assigned. (See section codes next page.) This 2-credit course is graded, but it is ***not*** counted toward degree requirements.

Directed Research in Cognitive and Neural Systems

The variable credit directed research courses listed below are normally open only to advanced PhD students and students engaged in sponsored research projects. Instructor's consent is required, 1st and 2nd semester (Fall and Spring respectively).

Tuition for these courses will not be covered by GRASP (Graduate Research Assistant Scholarship Program) unless counted toward fulfillment of degree course requirements (see section Directed Research Courses on previous page).

A CNS PhD student may audit one 4-credit directed research course per term without charge after all course requirements have been completed when registered in Continuing Study Status.

GRS	CN	911, 912	Research in Neural Networks for Adaptive Pattern Recognition	DR Patrn Models
GRS	CN	915, 916	Research in Neural Networks for Vision and Image Processing	DR Visn Models
GRS	CN	921, 922	Research in Neural Networks for Speech and Language Processing	DR Spch Models
GRS	CN	925, 926	Research in Neural Networks for Adaptive Sensory-Motor Planning and Control	DR Motor Models
GRS	CN	931, 932	Research in Neural Networks for Conditioning and Reinforcement Learning	DR Cond Models
GRS	CN	935, 936	Research in Neural Networks for Cognitive Information Processing	DR Cog Models
GRS	CN	941, 942	Research in Nonlinear Dynamics of Neural Networks	DR Dynm Models
GRS	CN	945, 946	Research in Technological Applications of Neural Networks	DR Appl Models
GRS	CN	951, 952	Research in Hardware Implementations of Neural Networks	DR Hdwr Models

Course Section Codes:

B1 Bullock	C1 Carpenter	C2 Cohen	G1 Grossberg
G2 Gorchetchnikov	G3 Guenther	M1 Mingolla	S1 Schwartz
S2 Shinn-Cunningham	T1 Tan	Y1 Yazdanbakhsh	

The section code X1 is used for courses numbered 981-988:

GRS	CN	981, 982	Certified Full-time Study	Cert FT Study
GRS	CN	983, 984	Continuing Study Part-time	Cont Study PT
GRS	CN	985, 986	Continuing Study Full-time	Cont Study CFT

Courses in Related Departments

On the following pages you will find a list of courses that may be of interest to CNS students whose program of study includes courses outside the CNS Department.

See the Class Schedule (http://www.bu.edu/reg/) for class times, and for additional listings. See the GRS Bulletin (http://www.bu.edu/bulletins/grs/) for course descriptions, prerequisites, etc. Selection of courses in other departments is a topic you should plan carefully, in consultation with your advisor. You may also wish to speak to instructors in order to learn more about course content and to check prerequisites.

BIOLOGY
CAS BI 545 Neurobiology of Motivated Behavior
CAS BI 554 Neuroendocrinology
CAS BI 570 Cognitive Ethology
GRS BI 575 Techniques in Cellular and Molecular Neuroscience
GRS BI 644 Neuroethology
GRS BI 645 Cellular and Molecular Neurophysiology
GRS BI 655 Developmental Neurobiology
GRS BI 676 Neurobiology/Biophysics
GRS BI 755 Cellular and Systems Neuroscience
GRS BI 756 Systems and Behavior Neuroscience

COMPUTER SCIENCE
CAS CS 535 Complexity Theory
CAS CS 537 Randomness in Computing
CAS CS 542 Machine Learning
CAS CS 580 Advanced Computer Graphics
CAS CS 585 Image and Video Computing
GRS CS 640 Artificial Intelligence
GRS CS 670 Performance Analysis of Computer Systems
GRS CS 680 Graduate Introduction to Computer Graphics

ENGINEERING

Biomedical Engineering
ENG BE 509 Quantitative Physiology of the Auditory System (meets with CN560)
ENG BE 515 Introduction to Medical Imaging
ENG BE 540 Bioelectrical Signals: Analysis and Interpretation
ENG BE 550 Bioelectromechanics
ENG BE 560 Biomolecular Architecture
ENG BE 563 Cellular and Molecular Systems Analysis
ENG BE 570 Introduction to Computational Vision
ENG BE 701 Auditory Signal Processing: Peripheral
ENG BE 702: Auditory Signal Processing: Central
ENG BE 710 Neural Plasticity and Perceptual Learning
ENG BE 715 Functional Neuroimaging
ENG BE 740 Parameter Estimation and Systems Identification
ENG BE 747 Advanced Signals and Systems Analysis for Biomedical Engineering

Mechanical Engineering
ENG ME 507 Process Modeling and Control
ENG ME 510 Production Systems Analysis
ENG ME 714 Advanced Stochastic Modeling and Simulation
ENG ME 720 Acoustics II
ENG ME 724 Advanced Optimization Theory and Methods
ENG ME 732 Combinatorial Optimization and Graph Algorithms
ENG ME 740 Vision, Robotics, and Planning
ENG ME 766 Advanced Scheduling Models and Methods

Electrical and Computer Engineering
ENG SC 516 Digital Signal Processing
ENG SC 520 Digital Image Processing and Communication
ENG SC 571 VLSI Principles and Applications
ENG SC 575 Semiconductor Devices
ENG SC 578 Fabrication Technology for Integrated Circuits
ENG SC 710 Dynamic Programming and Stochastic Control
ENG SC 716 Advanced Digital Signal Processing
ENG SC 717 Image Reconstruction and Restoration
ENG SC 719 Statistical Pattern Recognition
ENG SC 761 Information Theory and Coding
ENG SC 775 VLSI Devices and Device Models

HEALTH SCIENCES
SAR HS 550 Neural Systems
SAR HS 582 Neuroanatomy and Neurophysiology
SAR HS 755 Readings in Neuroscience

MATHEMATICS
CAS MA 561 Methods of Applied Mathematics I
CAS MA 562 Methods of Applied Mathematics II
CAS MA 563 Introduction to Differential Geometry
CAS MA 565 Mathematical Models in the Life Sciences
CAS MA 570 Stochastic Methods of Operations Research
CAS MA 573 Qualitative Theory of Ordinary Differential Equations
CAS MA 574 Applied Nonlinear Dynamics
CAS MA 581 Probability
CAS MA 583 Introduction to Stochastic Processes
GRS MA 684 Applied Multiple Regression and Multivariate Analysis
GRS MA 685 Advanced Topics in Applied Statistical Analysis
GRS MA 717 Functional Analysis GRS MA 771 Introduction to Dynamical Systems
GRS MA 775 Ordinary Differential Equations and Dynamical Systems
GRS MA 776 Partial Differential Equations
GRS MA 779 Probability Theory I
GRS MA 780 Probability Theory II
GRS MA 781 Estimation Theory
GRS MA 782 Hypothesis Testing
GRS MA 785 Time Series Modeling and Forecasting
GRS MA 861 Mathematical and Statistical Methods of Bioinformatics
GRS MA 881 Topics in High Dimensional Data Analysis

MEDICAL SCIENCES

(Please note: The Boston University Medical Campus follows a calendar that differs from that of the Charles River Campus.)

Anatomy and Neurobiology

GMS AN 702 Neurobiology of Learning and Memory
GMS AN 703 Neuroscience
GMS AN 802 Experimental Design and Statistics
GMS AN 807 Neurobiology of the Visual System
GMS AN 808 Neuroanatomical Basis of Neurologic Disorders

Behavioral Neuroscience

GMS BN 775 Human Neuropsychology I
GMS BN 776 Human Neuropsychology II
GMS BN 777, 778, 779 Basic Neuroscience
GMS BN 793 Adult Neurologic Communication Disorders
GMS BN 794 Brain Asymmetry
GMS BN 795 Neuropsychology of Perception and Memory
GMS BN 796 Neuropsychological Assessment I
GMS BN 797 Neuropsychological Assessment II
GMS BN 798 Functional Neuroanatomy in Neuropsychology
GMS BN 821 Seminar in Neuroimaging

PSYCHOLOGY

CAS PS 520 Research Methods in Perception and Cognition
CAS PS 524 Remembering the Past: The Psychology of Memory
CAS PS 525 Cognitive Science
CAS PS 528 Human Brain Mapping
CAS PS 530 Neural Models of Memory Function
CAS PS 544 Developmental Neuropsychology
CAS PS 545 Language Development
CAS PS 546 Cognitive Development
CAS PS 548 Perceptual Development
CAS PS 573 Abstract Thought
GRS PS 737 Memory Systems of the Brain
GRS PS 738 Techniques in Systems and Behavioral Neuroscience
GRS PS 821 Learning
GRS PS 822 Visual Perception
GRS PS 823 Verbal Processes
GRS PS 824 Cognitive Psychology
GRS PS 828 Seminar in Psycholinguistics
GRS PS 829 Principles in Neuropsychology
GRS PS 831 Seminar in Neuropsychology
GRS PS 832 Physiological Psychology
GRS PS 833 Advanced Physiological Psychology
GRS PS 835 Attention
GRS PS 844 Theories of Development
GRS PS 845 Topics in Perceptual Development
GRS PS 848 Developmental Psycholinguistics

CNS Course Books 2010–2011

CAS CN500–Computational Methods (TBD: *not offered in 2010-2011)*

Optional:

[Kreyszig] Kreyszig, E. (1992). *Advanced Engineering Mathematics, 7th Ed.* New York, NY: John Wiley and Sons.

CAS CN510–Neural Models I (Gorchetchnikov: Fall 2010)

Required:

[A&D] Abbott, L.F. & Dayan, P. (2005). *Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems*. Cambridge, MA: MIT Press (paper)

[KS&J] Kandel, E.R., Schwartz, J.H. & Jessel, T.P. (Eds.) (2000). *Principles of Neural Science (4e).* New York, NY: McGraw–Hill.

Optional:

[B&N] Brauer, F. & Nohel, J.A. (1969). *The Qualitative Theory of Ordinary Differential Equations (2e)*. New York, NY: Dover Publications. (paper)

[Levine] Levine, Daniel (2000). *Introduction to Neural and Cognitive Modeling (2e).* Mahwah, NJ: Lawrence Erlbaum Associates. (paper)

CAS CN520–Neural Models II (TBD: Spring 2011) ***– may not be offered in 2010-2011***

Required:

[DH&S] Duda, R.O., Hart, P.E. & Stork, D.G. (2001). *Pattern Classification (2e).* New York, NY: Wiley–Interscience.

Optional:

[HK&P] Hertz, J., Krogh, A. & Palmer, R.G.(1991). *Introduction to the Theory of Neural Computation*. Redwood City, CA: Addison Wesley. (paper)

CAS CN530–Vision Models (Yazdanbakhsh: Spring 2011)

Required:

[Palmer] Palmer, S.E. (1999). *Vision Science: Photons to Phenomenology.* Cambridge, MA: MIT Press.

[Yantis] Yantis, S. (2000). *Key Readings in Visual Perception* Baltimore, MD: Psychology Press

Optional:

[KS&J] Kandel, E.R., Schwartz, J.H. & Jessel, T.P. (Eds.) (2000). *Principles of Neural Science (4e).* New York, NY: McGraw–Hill.

CAS CN540–Movement Models (Bullock: Spring 2011)

(No books)

CAS CN550–Memory Models (TBD) ***– may not be offered in 2010-2011***

Required:

[DH&S] Duda, R.O., Hart, P.E. & Stork, D.G. (2001). *Pattern Classification (2e).* New York, NY: Wiley–Interscience.

Optional:

[Shacter] Shacter, D.L. (1996). *Searching for Memory: The Brain, the Mind, and the Past*. New York, NY: Basic Books. (paper)

CAS CN560–Speech Models (Shinn–Cunningham: Fall 2010)

Required: none (materials provided online)

CAS CN570–Learning Models (Tan: Spring 2011)

Optional:

[Klein] Klein, S. (1995). *Learning: Principles and Applications (4e).* New York, NY: McGraw–Hill. (paper)

[Mazur] Mazur, J. (2001). *Learning and Behavior (5e).* Englewood Cliffs, NJ: PTR Prentice Hall.

CAS CN580–Neuroscience Introduction (Schwartz: Fall 2010)

Required:

[KS&J] Kandel, E.R., Schwartz, J.H. & Jessel, T.P. (Eds.) (2000). *Principles of Neural Science (4e).* New York, NY: McGraw–Hill.

Optional:

[B&B] Bower, J.M. & Beeman, D. (Eds.) (1994). *The Book of Genesis*: *Exploring Realistic Neural Models with the General Neural Simulation System (2e).* New York, NY: Springer–Verlag.

GRS CN700–Neural Model Methods (Cohen: Spring 2011)) ***– may not be offered in 2010-2011***

Required:

[HT&F] Hastie, T., Tibshirani, R., & Friedman, J. (Eds.) (2001). *The Elements of Statistical Learning*. New York, NY: Springer–Verlag.

GRS CN710─Neural Research: Comparative Analysis of Learning Systems (Carpenter: *not offered in 2010-2011)*

(No books)

GRS CN720─Planning Models (Bullock: *not offered in 2010-2011*)

(No books)

GRS CN730─Models Of Visual Perception (Mingolla: Spring 2011)

(No books)

GRS CN740─Movement Models (Guenther: *not offered in 2010-2011*)

(No books)

GRS CN760─Speech Models II (Cohen: Fall 2010)

Required:

[R&J] Rabiner, L. & Juang, B.H. (1993). *Fundamentals of Speech Recognition.* Englewood Cliffs, NJ: PTR Prentice Hall. (paper)

GRS CN780─Computational Neuroscience (Schwartz: Spring 2011)

(No Books)

REGISTRATION

Each registration period, students must meet with their advisors to go over course selections and to have their forms signed. Please plan ahead in order to meet deadlines.

An overview of the registration process follows; however, you should please also read the materials provided to you by the Graduate School each term.

Fall & Spring Registration:

All continuing students must complete registration for the following term during the current term: In accordance with GRS deadlines, all GRS students will complete spring 2011 registration during the fall 2010 term, and fall 2011 registration during the spring 2011 term.

GRS registration packets, including forms and instructions, will be distributed to students during the (pre)registration period, unless the student is currently in continuing student status. [CNS RAs/TFs registering for credit courses (*but less than 12 course credits)* submit the full-time certification form contained in this packet.]

Students fulfilling the last of their course requirements will register for continuing student status in the following term by completing and submitting a *continuing student status registration form* (available from GRS), as will TFs returning to continuing student status. [CNS RAs/TFs complete the full-time side of the form.]

GRS registration confirmations are sent at the start of the term to students currently in continuing student status whose continuing study course registration was processed on a roll over basis by GRS. Confirmations include full-time certification forms specific to students registered in continuing student status. [CNS RAs/TFs whose continuing student status registration was processed by GRS must also submit a full-time certification form for the term.]

Students registering for coursework should bring their signed forms to the CNS office to obtain their 6-digit advising code then add their courses via the Student LINK. Signed registration forms (aka course worksheets) AND completed full-time certification forms should be left with Carol or Robin for forwarding to GRS.

Please note that full-time certification forms must be completed and submitted every term regardless of your current status or whether GRS has added the continuing study course: A (new) full-time certification form must be submitted for each term of registration, by the deadline provided.

Students are advised to check their registration status via the LINK each term, as well as to review their transcripts for accuracy.

Summer Registration:

Students who will complete their remaining degree requirements in the summer months and will not continue in the fall term must register for a tuition-bearing course in the summer term, typically a continuing student status course, in order to satisfy the GRS residency requirement.

Students who *will* continue in the fall term and who are engaged in full-time research as an essential component of their graduate degree programs during the summer are eligible for summer research registration status: This is a no-cost mechanism whereby graduate students who are engaged in academic research during the summer can be appropriately registered as students for purposes of loan eligibility and tax considerations. Students seeking summer research status should complete a summer research status registration form, obtain appropriate signatures, and submit the form to Carol for forwarding to the GRS Records Office. The form includes a certification of full-time study that will document the student's commitment to research during the summer. [CNS RAs who will continue in fall register in this status.]

Compliance Requirements for Registration:

Please check your compliance status via the Student Link. If you are not in compliance, you will not be able to either register for an upcoming semester or adjust your schedule. The Registrar's Office cannot lift any holds to make adjustments. Compliance requirements are:

1. all students must provide a BU alert phone number and confirm or update this number once per semester;
2. all students must settle their semester account by the established payment deadlines for the semester; and
3. all full time and international students must comply with Massachusetts law that requires students to provide proof of having completed a series of immunizations.

Offices, telephone numbers, and email addresses
CAS/CNS Faculty, Affiliated Faculty, Staff, & Visiting Researchers

NAME	POSITION	OFFICE	PHONE	EMAIL@cns.bu.edu (unless noted)
Agapiou, John	CNS Sr. Postdoctoral Associate	207	3-8693	agapiou
Ames, Heather	CNS Research Scientist	308B	3-6174	starfly
Amos, Robin	CNS Senior Admin Secretary	201	3-9481	ramos
Atema, Jelle	BIOL Professor; Director BUMP	BUMP	508-289-7499	atema at bu.edu
Balasubramanian, M.	CNS Research Fellow	–	–	mukundb
Barbas, Helen	SAR Professor Health Sciences	SAR	3-5036	barbas at bu.edu
Beal, Deryk	CNS Visiting Researcher	102	3-6181	dsbeal at bu.edu
Bizley, Jennifer	CNS Visiting Researcher			bizleyjk at bu.edu
Bohland, Jason	SAR Assistant Professor Health Sciences	SAR	3-9168	jbohland at bu.edu
Bowlby, Brian	CNS Director Computation Labs	211	3-7673	bowlby
Bradford, Cynthia	Asst. Director, Ctr. Adaptive Systems	203A	3-7670	cindy
Brady, Michael	CNS Software Developer III	109	–	mcbrady
Bressler, Scott	CNS Research Specialist	304	3-8693	scbressler at verizon.net
Brumberg, Jonathan	CNS Research Assistant Professor	102	3-6181	brumberg
Bullock, Daniel	CNS Professor	214	3-9486	danb
Caldwell-Harris, C.	PSYCH Associate Professor	PSY	3-2956	charris at bu.edu
Cao, Yongqiang	CNS Research Assistant Professor	305	–	yqcao
Carpenter, Gail	CNS Professor	303	3-9483	gail
Chen, Sufen	CNS Research Associate	–	–	chen128 at bu.edu
Cohen, Michael	CNS Associate Professor	212	3-9484	mikec
Colburn, Steven	ENG Professor and HRC Director	ENG	3-4342	colburn at bu.edu
Desbordes, Gaelle	CNS Postdoctoral Associate	306	–	gdesbord
Eden, Uri	MATH Assistant Professor	MATH	3-9553	tzvi at bu.edu
Eichenbaum, Howard	PSYCH Professor/Dir. Neurosci.	PSY	3-1426	hbe at bu.edu
Eldred, William	BIOL Professor, Dir. PIN	BIO	3-2439	eldred at bu.edu
Gardner, Timothy	BIOL Assistant Professor	BIOL	347-683-7642	timothyg at bu.edu
Gleason, Jean Berko	PSYCH Professor Emeritus	PSY	3-4647	gleason at bu.edu
Gopal, Sucharita	GEOGRAPHY Professor	GEO	3-5744	suchi at bu.edu
Gorchetchnikov, A.	CNS Research Assistant Professor	213	–	anatoli
Grossberg, Stephen	CNS Wang Professor; Dir., Ctr. Adaptive Systems	205	3-7858	steve
Guenther, Frank	CNS Professor; Co-Director, GPN	309	3-5765	guenther
Hasselmo, Michael	PSYCH Professor	PSY	3-1397	hasselmo at bu.edu

Hayashi, Isao	CNS Visiting Researcher	208	–	ihaya at bu.edu
Hubbard, Allyn	ECE ENG Professor	ENG	3-2815	aeh at bu.edu
Jefferson, Carol Y.	CNS Administrative Assistant	201A	3-7676	caroly
Johnson, Megan	Sr. Prog. Coord., Ctr. Adaptive Systems	203	3-7857	mvj
Kantak, Kathleen	PSYCH Professor	PSY	3-9201	kkantak at bu.edu
Kim, Dae-Shik	BU MED Associate Professor	MED	617-414-2361	dskim at bu.edu
Kincaid, Thomas	ECE ENG Professor Emeritus	ENG	3-2806	tgk at bu.edu
Kirbiz, Serap	CNS Visiting Researcher	207	3-8693	searp
Kon, Mark	MATH Professor	MATH	3-9549	mkon at bu.edu
Kopco, Norbert	CNS Visiting Researcher	304	3-8693	kopco
Kopell, Nancy	MATH Professor	MATH	3-5210	nk at bu.edu
Kurkjy, Nicholas	CNS Staff Researcher		–	nkurkjy at bu.edu
Laskey, Christopher	CNS Information Technology Director	209	8-4385	laskey at bu.edu
Lee, Adrian KC	CNS Research Associate	–	–	akclee at nmr.mgh.harvard.edu
Leveille, Jasmin	CNS Postdoctoral Associate	308A	–	jasminl
Liederman, Jackie	PSYCH Professor	PSY	3-3129	liederma at bu.edu
Livingstone, Margaret	CNS Adjunct Professor	Harvard Med	617-432-1664	margaret_livingstone at hms.harvard.edu
Livitz, Gennady	CNS Research Scientist	308A	–	gl
Logothetis, Nikos	CNS Adjunct Professor	Max Planck	–	nikos.logothetis at tuebingen.mpg.de
Miller, Earl	CNS Adjunct Professor	MIT	617-252-1584	ekmiller at mit.edu
Mingolla, Ennio	CNS Professor and Chair	210	3-9485	ennio
Peeva, Maya	CNS Postdoctoral Associate	102	3-6181	mpeeva
Perkell, Joseph	CNS Adjunct Professor	MIT	617-253-3223	perkell at mit.edu
Pilly, Praveen	CNS Postdoctoral Associate	305	–	advait
Pomplun, Marc	CNS Adjunct Associate Professor	U MASS	617-287-6443	marc at cs.umb.edu
Raudies, Florian	CNS Postdoctoral Associate	208	–	fraudies at bu.edu
Reeves, Adam	CNS Adjunct Professor	Northeastern	617-373-4708	reeves at neu.edu
Saltzman, Elliot	SAR Associate Professor Phys Therapy	SAR	3-7494	esaltz at bu.edu
Savoy, Robert	CNS Adjunct Associate Professor	Harvard Med	781-862-5238	savoy at nmr.mgh.harvard.edu
Schwartz, Eric	CNS Professor	310	3-6179	eric
Sclaroff, Stanley	COMPUTER SCI Professor	CS	3-8919	sclaroff at cs.bu.edu
Sekuler, Robert	CNS Adjunct Professor	Brandeis	617-736-3277	vision at brandeis.edu
Sen, Kamal	BIOMED ENG Associate Professor	ENG	3-5919	kamalsen at bu.edu
Shinn-Cunningham, B.	CNS Professor and Dir Grad Studies	311	3-5764	shinn
Somers, David	PSYCH Associate Professor	PSY	3-1372	somers at bu.edu

Srinivasa, Narayan	CNS Adjunct Res. Associate Professor	–	–	nsrinivasa at hrl.com
Stern, Chantal	PSYCH Associate Professor	PSY	3-1396	chantals at bu.edu
Streeter, Tim	SAR Research Associate/AN Lab MGR	B04	3-8693	timstr
Tan, Can Ozan	CNS Lecturer	–	–	tanc
Teich, Malvin	ENG Professor ECE	ENG	3-1236	teich at bu.edu
Tourville, Jason	CNS Research Assistant Professor	103	–	jtour
Vaina, Lucia	ENG Professor BME	ENG	3-2455	vaina at bu.edu
Versace, Max	CNS Senior Research Scientist	308C	–	versace
Watanabe, Takeo	PSYCH Professor	PSY	3-1103	takeo at bu.edu
Wolfe, Jeremy	CNS Adjunct Professor	B&W Hosp	617-768-8818	wolfe at search.bwh.harvard.edu
Woodcock, Curtis	GEOGRAPHY Professor	GEO	3-5746	curtis at bu.edu
Yazdanbakhsh, A.	CNS Research Assistant Professor	213	–	yazdan
Zhu, Li	CNS Visiting Researcher		_	zhuli08 at bu.edu

CNS Students: Fall 2010

Student	GRS Degree Program	Advisor	CNS Office	email@cns.bu.edu (unless otherwise noted)
Anderson, Eric	PhD-pb	Bullock	-	era
Barnes, Timothy	PhD-pb	Mingolla	110	barnes
Berteau, Stefan	PhD-pb	Mingolla/Bullock	111	berteau
Bhavaraju, Venkata Murthy	PhD-pb	Mingolla	110	bvsm
Cao, Bo (Cloud Tsao)	PhD-pm	Mingolla/Yazdanbakhsh	101	ffcloud
Chandler, Benjamin	PhD-pb	Mingolla	101	bchandle
Chang, Hung-Cheng	PhD-pm	Grossberg/Cao	105	zhanghz
Clark, Benjamin	PhD-pb	Shinn-Cunningham	112	bjc
Cormier, Justine	MA	Shinn-Cunningham	107	
Denovellis, Eric	PhD-pb	Bullock/Miller	110	edeno
Doon, Jeffrey	PhD-pb	Mingolla	107	jdoon
Foley, Nicholas	PhD-pb	Grossberg/Mingolla	101	nfoley
Fortenberry, Bret	PhD-pb	Grossberg	108	bret
Franklin, Daniel	PhD-pm	Grossberg	106	franklin
Galbraith, Byron	PhD-pm	Bullock	110	bvg
Golfinopoulos, Elisa	PhD-pb	Guenther	102	egolfino
Guo, Wei	PhD-pm	Shinn-Cunningham	110	weiguo
Hay, Todd	PhD-pm	Schwartz	106	thay
Ivey, Richard	PhD-pm	Bullock/Grossberg	105	rivey
Jia, Nan	PhD-pb	Guenther/Brumberg	107	jian
John, Yohan	PhD-pm	Bullock	105	yohan
Johnson, Christopher	PhD-pb	Bullock	108	effigies
Kazerounian, Sohrob	PhD-pb	Grossberg	110	sohrob
Kong, Lingqiang	PhD-pm	Shinn-Cunningham	108	konglq
Law, Robert	PhD-pb	Guenther/Brumberg	102	rlaw
Layton, Oliver	PhD-pb	Mingolla/Yazdanbakhsh	108	owl
Lim, Yoonseob	PhD-pm	Shinn-Cunningham	112	yslim
Lorenz, Sean	PhD-pb	Guenther	102	slorenz
Markiewicz, Gretchen	MA	Shinn-Cunningham	107	ghmarkie
Markowitz, Jeffrey	PhD-pb	Grossberg/Gardner	107	jmarkow
Matlis, Sean	PhD-pm	Bullock	108	smatlis
Mhatre, Himanshu	PhD-pm	Grossberg	107	himanshu
Mozeika, Annan	MA	Schwartz	-	amozeika
Myers, Emma	PhD-pb	Guenther	107	emyers
Olivera, Santiago	PhD-pm	Carpenter/Mingolla	111	zantiago
Palma, Jesse	PhD-pb	Grossberg	110	jpalma
Panko, Mikhail	PhD-pm	Guenther	101	mikpanko
Patrick, Sean	PhD-pb	Mingolla	110	patricks
Rajaram, Siddharth	PhD-pm	Shinn-Cunningham	111	srajaram

Salazar Gomez, Andres	PhD-pb	Guenther	102	salacho
Saperstein, Sara	PhD-pb	Bohland	108	saperste
Satyavarta (Satya)	PhD-pm	Shinn-Cunningham	111	sat
Segawa, Jennifer	PhD-pb	Guenther	102	jsegawa
Silver, Matthew	PhD-pb	Grossberg/Bullock	110	mrsilver
Srinivasan, Karthik	PhD-pb	Grossberg/Yazdanbakhsh	111	skarthik
St. Hilaire, Melissa	PhD-pb	Bullock	105	msth
Wong, Charles	PhD-pb	Bullock/Versace	106	ccwong
Wurbs, Jeremy	PhD-pb	Mingolla	108	jdwurbs
Xia, Jing	PhD-pm	Shinn-Cunningham	112	jxia
Zaydens, Eugene	PhD-pb	Eden/Cohen	107	ezaydens
Zeid, Omar	PhD-pb	Bohland	108	siromar
Ziph-Schatzberg, Leah	PhD-pm	Shinn-Cunningham	-	lzs

CNS General Faculty-Student Information Meeting:

The CNS General Faculty-Student Information meeting gives us an opportunity to discuss questions and concerns about the department and to share information, as well as to talk informally. There is one meeting scheduled annually in the fall. Additional meetings may be scheduled as needed. Should an issue arise that you believe merits a special Faculty-Student meeting above and beyond the fall annual meeting, please email Professor Barbara Shinn-Cunningham (shinn@cns.bu.edu) explaining your request.

The annual CNS General Faculty-Student Information Meeting will be held:

Friday, September 10, 2010
10:30 AM – 12:00 PM
677 Beacon Street
Room B03 (classroom)

Meeting for 2011 graduates:

An informational meeting for all CNS students who will be graduating and/or looking for a job in 2011 will be held on:

Friday October 8, 2010
10:30 AM – 12:00 PM
677 Beacon Street
Room B03 (classroom)

This meeting is **REQUIRED** for all 2011 graduates; other students and postdocs are welcome. Students will be given basic information about applying for jobs and completing degree requirements. Most of the time will be spent sharing information and answering questions.

We will also be asking students to report their best guess for the earliest date they could graduate, the names of your three thesis readers (if you're getting a PhD), and your "dream job."

You should check with faculty about these matters in advance.

Please send Carol (caroly@cns.bu.edu) an email message about your attendance; and arrange to get the information if you have an unavoidable conflict.

CAS/CNS Colloquium Series, CELEST Science of Learning Seminar Series and Distinguished Lecturer Series

CAS/CNS Colloquia, CELEST Science of Learning Seminars, and CELEST Distinguished Lectures, unless otherwise noted, are held on Friday afternoons at 2:00 PM in Room B02, 677 Beacon Street, and are followed by a reception in Room B03.

Colloquium topics range from experimental neuroscience and psychology to hardware implementations and applications of neural networks, with lectures given by a variety of distinguished speakers from around the world. CNS students are encouraged to attend lectures, participate in discussions, and take the opportunity to meet the speakers at the informal reception following the talk.

Professor Frank Guenther will be organizing the CAS/CNS colloquium series this year. If you would like to suggest a possible future speaker (preferably one who does not need to travel far), please send Frank a note (guenther@cns.bu.edu). Include, if possible, the speaker's address, telephone numbers, and email, and a sentence or two about the speaker's research.

For current listings regarding the CAS/CNS Colloquium Series, CELEST Science of Learning Seminar Series, and CELEST Distinguished Lecturer Series please see:

http://www.cns.bu.edu/Colloquia

and

http://cns.bu.edu/CELEST/events/

Also check the two bulletin boards located on the 2nd floor between rooms 201 and 203. They have conference and other relevant postings that may not have been posted elsewhere.

CNS Special Interest Groups

Binaural Gang Meetings
Professor Barbara Shinn-Cunningham (shinn@cns.bu.edu) and Professor Steve Colburn of Biomedical Engineering (colburn@bu.edu) co-organize weekly meetings, open to Boston-area researchers, to discuss research in the general area of binaural and spatial hearing. Meetings typically are spent reviewing recent articles, hearing presentations about ongoing projects of participants, and reviewing conferences of interest. Please email Professor Shinn-Cunningham to be included in the email list for the binaural gang.

Brain, Behavior, and Cognition Seminars
The Department of Psychology's program in Brain, Behavior, and Cognition sponsors a Vision Colloquium and co-sponsors a Learning and Memory series with the Center for Memory and Brain. Both series are open to all interested persons. The time and location of the talks vary, with the majority occurring either Monday or Friday from 12:00–1:00 PM. Talks are either held in Room 109, 2 Cummington Street (Memory series) or Room 150, 64 Cummington Street (Vision series). To be placed on the mailing list or for more information, contact the BBC administrator, Julie McCann (jemccann@bu.edu). The Department of Psychology sends announcements of all talks to CNS via email.

Basal Ganglia Journal Club (BGJC): Reinforcement learning, decision, cognitive control, and sequential planning
This journal club meets once during most weeks throughout the year in the CNS Sensory-Motor Lab. The senior facilitators of the meetings are Professor Dan Bullock of CNS and Dr. Can Tan, a CNS graduate and postdoctoral fellow at Harvard Medical School. The purpose of the meetings is to keep abreast of new studies of reinforcement learning, decision, cognitive control, and sequential planning in humans and other primates. Of particular interest are newly-reported data that help constrain the development of realistic models of forebrain circuits, including basal ganglia elements, that enable motivated learning, queuing and control of planned behaviors. In each meeting, a participant reprises recent results and then helps lead a discussion of issues raised by the results. Typically, the results are drawn from a new journal article or book chapter, which participants are encouraged to read prior to the meeting. Those interested in being regular participants should contact Professor Bullock (danb@cns.bu.edu) to have their names added to the meeting announcement list.

Hearing Research Center Seminars
The Hearing Research Center (HRC) holds a colloquium series open to all interested persons. Talks are typically held every Friday morning from 10:30 AM to 12:00 PM in room 203 at 44 Cummington Street. For more information or to be included on the HRC seminar series mailing list, please contact the HRC administrator: Nicole Shutt (nshutt@bu.edu).

Speech Lab Meetings
Professor Frank Guenther (guenther@cns.bu.edu) organizes one-hour CNS speech lab meetings, held on Fridays at 12:00 PM, approximately twice a month during the academic year and summer. Attendees include several CNS faculty members and graduate students. These meetings are designed to keep students and faculty with an interest in speech perception and production abreast of the latest papers in the field. At each meeting, a different member presents a recent article and leads a discussion of the main issues raised by the article.

Security: Locking doors

It is ABSOLUTELY ESSENTIAL that the two outside doors at 677 Beacon Street remain closed AND LOCKED at all times. The doors from the lobby to the student offices also need to stay locked, with card access. The loss of computer or projection equipment would have serious consequences for the education of all students in the program, and students' work, books, and other possessions could be lost as well. In addition, please do not unlock or prop open building doors. They should be locked at all times. Using your card is a minor inconvenience when balanced against your needs and safety. Finally, please DO NOT let anyone into the building whom you do not know personally. This may seem unbearably rude at times, but thefts have followed from just such a kindness. If you wish to assist someone who (e.g.) has asked for a student by name, you can go and try to find that individual.

In case of emergency, phone BU Police: 3-2121 or Boston Police: 9-911.

Building and Grounds Maintenance and Repair
Emergency Building Repairs and Maintenance Requests: Phone 3-2105. Please report to staff during normal business hours; send emails to both Carol caroly@cns.bu.edu and Robin ramos@cns.bu.edu.

Use of email
The annual CNS faculty-student meeting provides one of many opportunities for individual or group discussion of questions and topics relating to the academic program and to student life. The CNS faculty welcomes these discussions, which, in the past, have led to a variety of innovations. It has been our experience that discussions of substantive issues are best carried out in person rather than by email. Please use general email messages only to distribute specific information.

Use of department phones
Local phone service is billed at a significantly high rate. Unlimited local calling service, as offered to residential customers, is not available. Except in emergencies, calls from university phones should be limited to business use. Additionally, the cost for directory assistance (411 calls) is high. Please use alternative resources such as the internet.

Web pages
Please observe high ethical standards when using all BU/CNS computing resources. Check that your personal web page presents you in a professional manner.

CAS/CNS Library

The CAS/CNS Library is located in Room 216, 677 Beacon Street.

The Library is only for the use of CAS and CNS faculty, staff, students, and visitors.

Megan Johnson (Room 203) is the CAS/CNS librarian. All checkout cards should be left with her. Send questions to mvj@cns.bu.edu or phone at (617) 353-7857.

All books are marked with red tape on the spine.

Books are shelved alphabetically by name of author. Periodicals are shelved alphabetically by title.

CAS/CNS Library catalog information is available on-line at:

http://www.cns.bu.edu/library

CHECKOUT POLICY

REGISTERED CNS STUDENTS may use books and journals in Room 216. Please re-shelve the books and journals you use when finished.

A book or a journal may be borrowed briefly by signing it out and giving Megan your BU ID. However, borrowed books and journals must not leave the CNS building (except for the purpose of photocopying at a nearby machine), so that they may remain accessible to all CAS/CNS members. Borrowed books and journals should be returned to Megan or to the library tray in her office, located in Room 203.

The CAS/CNS library should be considered as an addition to the University libraries and other libraries available through the Boston area consortium (including the inter-library loan program), and not as their replacement.

CAS/CNS Technical Reports

The CAS/CNS Technical Report series was started in January 1991 and now has over 500 titles. Copies of tech reports are kept in the CAS/CNS library (Room 216, 677 Beacon Street), as well as in the BU Science and Engineering Library (38 Cummington Street), and are listed in a national on-line catalog. Technical reports help to make recent work more readily available to interested readers, and they can be cited as references before an article appears in print. A sample citation is:

CAS/CNS Technical Report, CAS/CNS-TR-2010-001. Boston, MA: Boston University.

Many technical reports are available on-line at:

http://digilib.bu.edu/journals/ojs/index.php/trs

Robin Amos (ramos@cns.bu.edu, Room 201) is the administrative coordinator of the tech report series. If you would like to have an article considered for publication in the series, please email Robin a *single-spaced electronic file version in either pdf or word* of the tech report.

Figures and tables may be embedded or placed at the end of the text, with each caption printed on the same page as the figure.

Normally, *technical reports are articles that have already been submitted for publication.* At the time of submission to the CAS/CNS technical report series, please write Robin a note stating where the article has been submitted for publication, and keep him informed about later acceptance and publication.

In special cases, completed pieces of work that will not be submitted for publication may be accepted as technical reports if submitted by a CNS faculty member. For example, a technical report might detail data analysis procedures or simulation software that may be of general interest and utility to the CNS community but may not be suitable for journal publication. At the time of submission, please write a note to Robin detailing why the work will not be submitted for publication elsewhere and why it is appropriate for a technical report. Please note that incomplete research is not acceptable for publication as a technical report.

Incomplete (I) Grades

Students are strongly encouraged to complete all courses on time. Incompletes almost always interfere with the subsequent endeavors—coursework, research, and (certainly) vacations. If an incomplete is unavoidable, make a *written* agreement with the instructor regarding what needs to be done and when you intend to complete all coursework. Keep the instructor posted about any changes in these proposed plans. In all cases, make every effort to complete the course within a few weeks.

Research Assistants should complete all courses in the allotted time. If an incomplete (I) grade becomes absolutely necessary, you must complete the course within three weeks of the last class meeting, or face possible suspension of your stipend. In extraordinary circumstances (e.g., illness), your professor may agree in writing to a longer delay if the delay is also pre-approved by the department chair.

Note that CNS students may not take the MA or PhD exam with a pending "I" grade.

Please note that the University has strict guidelines regarding incomplete grades. Namely, an incomplete that remains for more than 12 months may be changed, automatically and permanently, to an F.

Conference at CNS

ICCNS 2011

Fifteenth International Conference on Cognitive and Neural Systems

Boston University
Department of Cognitive and Neural Systems

May 11–14, 2011

http://cns.bu.edu/meetings/

The CNS Department will host its annual four-day meeting, with invited lectures and tutorials plus contributed lectures, posters, and social events.

CNS Computer Systems

The following pages contain information about the CNS computer systems, including an account application. Please familiarize yourself with this as soon as possible, so that you can use the computer resources efficiently, and follow the basic rules outlined below.

All students should try to optimize the use of the CNS computer network. Please:

Read (and dispose of) all email at least twice a week: System changes are announced in this way, and it is assumed that all users have been notified once the messages go out.

Minimize laser printer output, especially to the color printer. Printer use should be restricted to research work, not for coursework or personal use.

Plan assignments to avoid last-minute rushes (that may result in a system overload).

Use disk space carefully; remove large amounts of data as quickly as possible and compress data regularly.

Attend to necessary security rules.

Use all equipment carefully and with respect for all other users.

Pick up scrap paper and other trash; clean dusty monitors; help keep office spaces neat.

Note that there are two special mailing lists for certain kinds of computer problems.

Requests for installation of software or questions about general policy should be sent to:
sysadm@cns.bu.edu

Descriptions of software or hardware problems should be sent to:

help@cns.bu.edu

CNS Director of Computation Labs
Brian Bowlby
bowlby@cns.bu.edu
Room 211, (617) 353-7673

In the event that the systems administrator is not available and there is an urgent system problem, call (617) 922-4597 (Brian's cell phone).

CNS Computer Account
Application Form

Please submit to Brian Bowlby, Director of Computation Labs, Room 211, 677 Beacon Street. Please bring your BU ID.

Full Name: _____

BU ID Number: _____

Home Address: _____

Home Phone: _____

Business Phone: _____

CNS Office Extension: _____

CNS Room Number: _____

BU ACS Login Name: _____

Your password on the CNS email system will be the Kerberos password you set up with your BU ACS account.

Please choose your desktop operating system preference:

Windows _____ Linux _____

Brian Bowlby, PhD
Director of Computation Labs
Department of Cognitive and Neural Systems
Room 211, 677 Beacon Street

Email: bowlby@cns.bu.edu
Phone: (617) 353-7673

Using the CNS Computer Systems

The CNS computer network consists primarily of Linux and Windows workstations. There are also a few Sun/Solaris and Apple Macintosh systems. The Linux and Windows systems are the primary computer systems for CNS coursework, research, and electronic communication.

Getting an account

To obtain an account on the CNS computer systems, you must first set up a BU ACS account. You can do this at the Office of Information Services and Technology (IS&T) with locations at both 533 Commonwealth Ave. and the Mugar Library. Please note that the password you set up at this time will be the password you will use to access the CNS Linux systems and the CNS email system. After you have created this account, you should fill out the CNS account request form, which is available in this handbook or at registration (or from the CNS office during regular business hours). Fill out the form completely, and submit it in person to Brian Bowlby, the CNS systems administrator, in Room 211 at 677 Beacon Street. You will use the same user name on all of the CNS computer systems. Your user name will also identify you for electronic mail purposes. With this in mind, it is wise to choose a log in name that is professional and represents you well to the outside world.

Logging in to a CNS Linux system

To log in to any CNS Linux system, enter your login name at the *login:* prompt, and then press ENTER (if the prompt appears inside a window, you may have to move the mouse pointer inside the window first). Enter your password at the *password:* prompt, and press enter again. Your password will not appear as you type it. If you make a mistake you will be prompted to try again. Once you have logged in successfully, you will see a UNIX prompt, which will typically end with a > or % character, or you will see a graphical desktop (if you are logging into an X Window system). At this point you may enter UNIX commands or start graphical programs.

Always log out when you are finished using the system. This helps protect your account and files, and makes the station available to another user. To log out, you should enter the *logout* command at the UNIX prompt. If you logged into a system already running X (i.e., the login: prompt appeared within a window) you may need to logout by selecting a logout option from the window system main menu.

Changing your password

Your password on the CNS Linux systems is the same as your BU ACS password. In order to change this password, you will need to go to Information Services and Technology at either 533 Commonwealth Ave. or the Mugar Library. Make sure that you have your BU ID with you. Contact the systems administrator if you have questions.

Learning about Linux

Most of the CNS UNIX systems are Linux systems. There are also some Sun or Sun-compatible workstations using Solaris System 8. These systems are somewhat different, but the basic commands for getting around and manipulating files are quite similar. Most of the time, you will be using one of the Linux systems, unless you have a specific reason to use one of the other UNIX systems. The Linux systems should all accept virtually the same commands, except for some commercial software packages that are only licensed to specific hosts.

If you are new to Linux and/or the X window system, you are strongly encouraged to attend one of the free classes offered early in the semester by BU's Office of Information Services and

Technology. A schedule of the classes will be available early in September and late January. You may also want to get a book on Linux and/or X. Many good books are available at a variety of levels.

On-line documentation is available using the *man* (short for "manual") command.

Type *man command*

> If you know the name of the command you're interested in. Otherwise try: *man -k keyword*.
>
> To look for entries in the on-line manual that relate to a particular keyword or topic. You may also find useful information with the *help* command.

Communicating on the CNS computer systems

You can send electronic mail from your CNS UNIX account to other CNS users, users of other BU machines, and people around the world on a variety of interconnected networks.

*Your email address is **user@cns.bu.edu** where **user** is your login name*. Your CNS email can be accessed in a number of ways. The department's mail server supports both POP3 and IMAP protocols, so you can use most popular email clients such as Eudora, Netscape Messenger, Mozilla Thunderbird, and Microsoft Outlook/Outlook Express. The IMAP protocol is recommended since this leaves your email on the server so that it can be accessed from other locations. However, if you always check your email from one computer (your personal laptop, for instance), you might prefer the POP3 protocol. Terminal based email access is also supported, including via PINE, ELM, and MUTT, the most popular terminal interfaces. PINE is particularly easy to learn for novices and is the supported email program for terminal-based email access. It is a menu driven program, with all commands being single keystrokes. Online help is available at all screens. Finally, the department also provides web-based access to your email at the URL http://www.bu.edu/webmail/horde-cns/..

There are special CNS email addresses set up to send email to lists of users. If you would like to send email to one of those addresses, please see Brian Bowlby or an administrative assistant for the appropriate address and instructions for proper use.

Printing on the CNS Linux systems

There are several laser printers available from the CNS Linux systems. To print regular text files, use the *lpr* command. Specify which printer you want to use with the -P option (note the capitalization) followed by the name of the printer without a space between -P and the printer name. For example: *lpr –P HP2300-114.*

Postscript files can be printed in the same way. The instructions for printing from software such as desktop publishing programs vary according to the program.

Publicly available printers currently include:

HP2300-114 located in Room 114
HPCOLOR-216 located in Room 216
(Color Laser – please limit printing and check to see whether paper or transparencies are in the machine!)

Note that there are other printers on the CNS network, most of which are not publicly available.

Please make sure you know which printer you have selected before sending a job.

Please be considerate of others when printing large files, especially with color and graphics. Don't use the printers as copying machines; print one copy and then use a photocopier. You can also reduce unnecessary wasted printouts by previewing your data on the screen. Check into *ghostview* (or *gv*) for previewing Postscript files, or *xdvi* for TeX files, for example. Instead of printing UNIX manual pages on the laser printers, you can read them in their typeset style on the screen with the *xman* command.

When a laser printer starts printing faintly, it may not need a new toner cartridge right away. Sometimes the print can be improved by removing the toner cartridge, shaking it back and forth, and then reinserting it. If a toner cartridge does need to be replaced, send electronic mail to *printer@cns.bu.edu*.

Software on the CNS Linux systems

In addition to the software provided with the Linux system. CNS has a number of public domain and commercial software packages. These include the Emacs editor, ghostview previewer for Postscript files, the X Window System, and various X graphics packages, the TeX document preparation system, Mathematica, Matlab, and ESPS/Waves+, a digital signal processing package.

The CNS computer labs

The CNS Department provides a computer lab for general student use. This lab, in room 114, has an Apple Macintosh system, a PC running Microsoft Windows, and a PC running BU Linux. The Windows system is connected to a Kodak scanner which has a built in document feeder. Please restrict your use of the scanner to CNS-related work. An HP LaserJet 2300 printer (with a duplex unit) is also set up in this lab for student use.

Other computer resources on campus

The Office of Information Services and Technology (IS&T) offers a number of useful computing services to the BU community. More information on IS&T services is available during business hours at the IS&T front desk (located at both 533 Commonwealth Ave. and the Mugar Library).

Early in each semester, there are tutorial sessions on a variety of practical computing topics, from UNIX and the X Window System to Macintosh and PC word processing, and many others. Copies of the tutorial schedule are made available at the start of each semester.

IS&T operates the Academic Computing System (ACS), an IBM UNIX system with word processing, spreadsheet, and other software. ACS is available to all BU students, faculty, and academic staff. Enter the command:

telnet acs3.bu.edu

and login as "new". Provide the requested information, and then go to the IS&T front desk during regular business hours to show the attendant your student ID. Your account should be ready within a day. Please note that you will need to set up your ACS account BEFORE you can get a CNS account.

IS&T also operates a Connection Machine supercomputer; see the IS&T front desk for information. Another useful IS&T service is the Information Help Center located at 100 Cummington Street. They offer support on Macintosh and IBM-compatible personal computers.

They have systems and software to try out, a limited amount of free software (bring your own disk), tutorials, and more. The Information Help Center is not, however, a production environment where you can go work on papers or print anything. They are open weekdays from 9:00 AM–4:30 PM, and their telephone number is (617) 353-7272.

Another useful computer resource can be found at the Mugar Library, 771 Commonwealth Avenue, located next to the George Sherman Union. They have a number of databases on CD-ROM, and others available from special terminals, that students may use by appointment. Inquire at the Mugar reference desk for more information. The BU Libraries also offer an on-line library catalog. The system can locate books and periodicals at any of BU's libraries and can tell you whether a specific book is available or has been checked out or on reserve.

The library catalog is available at terminals in the library or by typing:

telnet library

from the prompt on any BU UNIX system.

A wide variety of other resources are available from universities, companies, and non-profit and government organizations worldwide via the Internet. Several books about the Internet have been published, and some documentation is available from the IS&T front desk as well. You can also learn a lot about Internet resources from other students, from USENET newsgroups, and from the network itself.

GRADUATION MILESTONES:

MA Comprehensive Exam and PhD Qualifying Exams

The MA exam will be given on:

Friday, January 14, 2011

Tuesday, May 17, 2011

The two parts of the written PhD exam will be given on the mornings of successive days:

Friday, January 14, 2011 and Saturday, January 15, 2011

Tuesday, May 17, 2011 and Wednesday, May 18, 2011

If you plan to take either exam in 2011, please return the enclosed form (p.40) to Robin Amos or Carol Jefferson (Room 201, 677 Beacon St.) as soon as possible but no later than Friday October 29, 2010 [for the January exam]; and no later than Friday March 11, 2011 [for the May exam]. All students should discuss plans for taking the MA or PhD exam with their faculty advisors. In addition, course schedules should be planned in order to allow students to complete necessary CNS courses before the time at which the exam is to be taken.

Note: The exams are composed anew for each date based on who has signed up and what sections they will take. Please do not sign up and then simply decide not to show up. If you sign up and then change your mind, immediately inform Robin Amos (ramos@cns.bu.edu) of your decision. This will save both Robin and the professors writing the exam from hours of needless effort. Failure to show up for an exam that you committed to taking must be explained to the Director of Graduate Studies, Professor Barbara Shinn-Cunningham.

You must register for the term in which you complete your degree requirements as well as the term immediately before. Thus, for example, an MA student who plans to graduate upon taking the exam in January 2011 may need to register for the Spring 2011 term, as well as the Fall 2010 term before it. Check with Carol, or with the Graduate School office, if you have any questions about this.

MA Comprehensive Exam:

A student taking the MA Exam must have completed **at least four 500-level CNS courses**. MA students usually take the Comprehensive Exam by the end of either their second or third semester in the CNS Program.

The MA Comprehensive Exam is given in a single 4-hour session (9:00 AM–1:00 PM). For each of the 500-level CNS courses (CN 500, 510, 520, 530, 540, 550, 560, 570, 580) questions are divided into equal-valued blocks of 2 types, "A" and "B". Each student must answer 4 A-blocks plus 4 B-blocks, for a total of 8 blocks. Students must have taken the classes covered by the blocks they choose, or get special permission in advance. Thus, a student who has taken exactly 4 CNS courses will have no choice of which blocks to choose; a student who has taken more than 4 CNS courses may complete the required 8 blocks by selecting any 4 A-blocks plus any 4 B-blocks, as long as they correspond to courses taken.

PhD students may not take the MA exam, unless special circumstances apply.

PhD Qualifying Exam:

A student taking the PhD exam must have completed **8 CNS courses**. In addition, a PhD student must have completed an approved supervised research effort during their CNS tenure, equivalent to at least one full summer as a research assistant.

Full-time PhD students should carefully plan their course schedule in order to be prepared to take the Qualifying Exam at the end of their third semester (January of their second year) in CNS. In order to be able to do this, students usually need to take at least 6 CNS courses in their first year.

The PhD Qualifying Exam is given in two 3-hour segments. Each student taking the exam is asked to declare a specialty area: vision, motor control, memory, or speech. Normally, the declared specialty area is related to the student's intended topic of thesis research, although this is not necessarily the case. On the exam, a student will spend more time answering questions on the specialty area than in the other areas, as follows.

Part I - Specialty (9:00AM–12:00PM): This part of the exam focuses on the student's declared specialty area: vision, motor control, memory, or speech. Questions probe beyond basic material taught in courses and require some expertise in the general topic area, including the ability to integrate information and identify important and emerging research topics in the discipline.

Part II - Non-specialty (9:00AM–12:00PM): Students select 4 areas (roughly corresponding to one CNS course each), to answer questions for each in a 45-minute block:

Vision (530)
Motor Control (540)
Memory (550)
Speech and Hearing (560)
Conditioning (570)
Computational Neuroscience (580)

Non-specialty questions expect students to demonstrate mastery of basic coursework and general knowledge in the area. None of the areas may be the specialty area chosen for Part I, so the choice of specialty area requires students to choose four of the remaining five non-specialty areas.

Note: A student taking the PhD Qualifying Exam for the first time must take both parts (I and II) on successive days. A passing grade on each of the two parts is required before the full exam is passed. However, a student who fails *but nearly passes* one part in the same exam session as passing the other part will not need to retake the passed part.

PhD Qualifying Exam: Written Proposal Option

Written Proposal

In lieu of the written qualifying exam, candidates wishing to pursue a PhD in Cognitive and Neural Systems (CNS) will be given the option of producing and defending a paper, henceforth referred to as the Written Proposal, describing a project appropriate for dissertation research. The Written Proposal will follow the formatting guidelines of a National Research Service Award (NRSA http://grants.nih.gov/training/nrsa.htm) pre-doctoral grant application. No student will be required to submit an actual NRSA application, but those that are eligible are encouraged to do so after passing the requirements for the CNS Written Proposal.

In most cases, the Written Proposal is expected to also serve as the candidate s prospectus, describing the work proposed for the PhD thesis. Once approved, the Written Proposal can then be turned in to the Graduate School of Arts & Sciences in partial fulfillment of the requirements of the PhD program.

Eligible candidates are encouraged to submit approved Written Proposals to the NIH to be considered for funding, although this is not a requirement.

The Written Proposal will be prepared in consultation with the faculty member who is expected to be the primary research supervisor for the proposed work.

Examining Committee

Following approval by the primary research supervisor, the candidate will identify three faculty members who agree to serve on the Examining Committee and will distribute to them final copies of the Written Proposal. One member will be designated as the Chair of the Examining Committee by the candidate, in consultation with the primary research supervisor and the members of the Examining Committee. The Written Proposal must then be turned in to the Director of Graduate Studies along with a form signed by the primary research supervisor and by the members of the candidate s Examining Committee. These signatures will indicate that

1) the primary research supervisor approves of the final Written Proposal;
2) the members of the Examining Committee agree to serve as evaluators of the Written Proposal as well as of the Oral Examination (see below); and
3) the Chair of the Examining Committee agrees to run the Oral Examination and report the outcome to the CNS Director of Graduate Studies.

All three members of the Examining Committee must be eligible to serve on dissertation committees within the Graduate School of Arts and Sciences. The primary research supervisor cannot be one of the three members of a candidate s Examining Committee. In many cases, the members of the Examining Committee are likely to end up serving as Readers for the candidates PhD dissertation, serving on his / her PhD committee; however, this is not required.

Oral Examination

Once the composition of the Examining Committee is approved by the Director of Graduate Studies, the candidate will schedule an oral defense of the Written Proposal. The oral defense will consist of a formal presentation, followed by a question period.

During the formal presentation, the candidate will give a brief (30 minute; no longer than 45 minutes) presentation of the aims, background, preliminary results, and proposed work described in the Written Proposal. The formal presentation portion of the oral defense is generally expected to be open to the public, but can be closed at the discretion of the candidate and the Examining Committee.

Following the formal presentation, the Chair of the Examining Committee will close the meeting, so that only the candidate and the Examining Committee remain for a closed question period. The question period is expected to last approximately 30 minutes, but the duration is at the discretion of the Examining Committee. The candidate will be asked questions about the proposed work, relevant scientific background, relevant technical background, and any other content that the Examining Committee deems pertinent to determining the candidate's qualifications to pursue the proposed research program and to earn a PhD in Cognitive and Neural Systems.

Following the question period, the Examining Committee will excuse the candidate to discuss his / her performance and to determine whether the candidate passed, passed with conditions (to be stipulated by the committee), or failed. The Chair of the Examining Committee will submit a brief report of the results of the examination to the Director of Graduate Studies, who will then convey the outcome to the candidate.

Timing

Most students opting to pursue this option are expected to submit and successfully defend a Written Proposal before the end of the fifth semester of study (excluding summer terms; typically, two and a half years after entering the graduate program). Any student opting for this form of PhD qualifying exam who does not successfully pass the exam by the end of seven semesters of study will be deemed to be failing to make adequate progress in the PhD program, and will have to petition the Director of Graduate Studies of CNS to remain in the PhD program. Any student who has matriculated into the CNS PhD program may elect to take the written qualifying exam under the format defined in the CNS Student Handbook 2010/2011 edition; however, a student who fails to successfully defend a Written Proposal to their Examining Committee cannot take the written qualifying exam in lieu of passing the Written Proposal Option.

MA Comprehensive Exam and PhD Qualifying Exam Form

Please return this form to Robin Amos or Carol Jefferson (Room 201, 677 Beacon Street).

NAME _____ DATE _____

EMAIL _____ ADVISOR _____

____ I plan to take the following exam on Friday, January 14, 2011 (MA, PhD I) and Saturday, January 15, 2011 (PhD II).
[Return form by Friday October 29, 2010.]

____ I plan to take the following exam on Tuesday, May 17, 2011 (MA, PhD I) and Wednesday, May 18, 2011 (PhD II).
[Return form by Friday March 11, 2011.]

[ ] MA Comprehensive [ ] PhD Qualifying Exam: [ ] Part I – Specialty [ ] Part II – Non-specialty

PhD Specialty (circle one): vision motor control memory speech

PhD Part II (circle four): 530 540 550 560 570 580

PhD exam: at least eight CNS courses. MA exam: at least four 500-level CNS courses.

CNS course	**Grade**	**CNS course**	**Grade**
CN 500 (Math I)	[ ]	CN 700 (Math II)	[ ]
CN 510 (Models I)	[ ]	CN 710 (Learning)	[ ]
CN 520 (Models II)	[ ]	CN 720 (Planning)	[ ]
CN 530 (Vision)	[ ]	CN730 (Vis. Perc.)	[ ]
CN 540 (Motor)	[ ]	CN740 (Motor Res.)	[ ]
CN 550 (Memory)	[ ]	CN 760 (Speech Reg.)	[ ]
CN 560 (Speech)	[ ]	CN780 (Comp Neuro)	[ ]
CN 570 (Condit.)	[ ]	CN810 (Vision)	[ ]
CN 580 (Neurosci)	[ ]	CN 811 (Vision)	[ ]

Fill in grades for courses completed. Circle courses you are now taking.

PhD Prospectus, Abstract, and Dissertation

As you approach your graduation date, you must submit a number of documents at specific intervals in advance of your graduation. These include (in chronological order) a prospectus (which is a dissertation outline/proposal), an abstract, and your finished dissertation. Exact deadlines for each document vary from year to year; deadlines for 2010–2011 are listed on the following pages. You will also find there information regarding the format and requirements for each document. To help you meet the numerous deadlines leading up to the defense date, a CNS Graduation Checklist is included (see pages [54-61]).

Official information regarding the format of each document should be obtained from the Graduate School, as requirements may change from time to time. The GRS Bulletin outlines requirements. Some general guidelines, including informal suggestions and a LaTeX style file that approximates the Boston University Dissertation Guidelines, can be found by entering the command "help dissertation" on any CNS UNIX machine. Carol or Robin can also show you sample abstracts. A Dissertation Outlines and Abstracts Guidelines memo follows. A Guide for Writers of Theses and Dissertations can be found at http://www.bu.edu/cas/pdfs/graduate/phd-dissertation-guide.pdf.

It is necessary for CNS students to submit a final copy of their prospectus with signature page and their dissertation to the department, so that they may be filed (prospectus) or bound and put in the BU library (dissertation). Additionally, a .pdf copy of your dissertation in final format should be submitted to Robin Amos for archiving. Please be sure to acknowledge all grant support received during your years at CNS. If you have any questions regarding this matter, please see Cindy Bradford (Room 203A).

Prospectus

The prospectus is a description of the work you are proposing to conduct for your PhD. The prospectus should be completed as soon as you and your readers have determined the problem your research will address and the scope of the work you hope to complete. The prospectus must be approved by the three readers of your dissertation committee, the Director of Graduate Studies, and the Department Chair, and submitted to the GRS Records Office. The prospectus should describe the specific aims of the work you will address, the approach you will take to address each specific aim of the work, results of preliminary work you have completed (demonstrating the feasibility of your approach), and the work that remains to be done before your research is complete. To the extent possible, it is useful to provide a rough estimate of the time required for completion of the proposed work in the form of a timetable. Even if you and your reader advisor agree that it is not possible to state a timetable, the exercise of trying to estimate completion times for a task or subtask is a useful one. For example, if one party estimates that a task should take about six days and the other party thinks it should take six months, chances are good that there has been some miscommunication about the nature of the task.

A goal of the prospectus is to get feedback from the readers of your thesis, whose job is to evaluate the scope, importance, and originality of the work you will perform to earn a PhD. This feedback ensures both that the work you plan to undertake is sufficiently substantial for a PhD

and that you have a realistic, achievable approach to reaching the goals you set. The prospectus serves as a type of contract between the student and his or her readers. By signing off on a prospectus, the readers affirm that if the student achieves all of the goals set out in the prospectus, the readers believe that the work will be sufficient for awarding of a PhD. Of course, due to the nature of research, research goals may change during the course of a project and the final scope of the thesis may differ substantially from what is proposed in a prospectus (e.g., if some of the proposed aims turn out to be significantly more difficult than originally envisioned, or if the direction of the research evolves in unexpected ways over the course of the project, etc.).

Writing of a prospectus should not be delayed until the bulk of the research for the PhD has already been conducted. Leaving the prospectus until this late in the PhD process reduces its utility: by informing all of your readers about the progress of your research before all the work is complete, you will benefit from their advice and insights. Furthermore, turning in a prospectus late in your graduate career may delay your graduation. (See the absolute deadlines described below; GRS rules dictate that the prospectus **must** be completed no later than about nine months prior to your graduation date.)

Although each student and research project is unique, a typical student who is making good progress in his or her research should be in a position to begin drafting a prospectus within a year to a year and a half of research.

The GRS sets a 20-page double-spaced maximum length for the prospectus, not counting references. Please consult with the GRS Bulletin or Martha W. Khan of the GRS Records Office for additional information about the formatting requirements for the PhD.

Abstract

The abstract of your dissertation should describe, in 350 words or less (a hard GRS limitation), the research you performed for your PhD. The PhD dissertation abstract will be circulated to a wide audience, inside and outside the University. You should write for an audience that is literate but that is not necessarily familiar with your research field. It may be helpful to imagine talking to a Dean (who will, in fact, be reading your abstract), explaining your topic, why it is interesting, and how your work advances knowledge. Avoid technical details, literature citations, and the first person (I or we).

Dissertation

The scope and content of a PhD dissertation can vary greatly from project to project. The length can vary from fewer than a hundred pages to more then three hundred pages. It is difficult to give clear guidelines for the format of a dissertation, as there are many different styles that are appropriate. A "traditional" dissertation is typically composed of an introduction that lays out the problem being addressed, a scholarly literature review that outlines what previous work has shown, chapters that describe in detail the different sub-projects making up the project, and a final summary chapter that puts the work accomplished back into a broader context, summarizing what was found and what it means and pointing out future directions that the work suggests. Alternatively, a dissertation may include substantial portions of text developed for a publication or publications in archival journals. In such cases, the organization of the parts of the dissertation may follow the organization of those research articles more closely than that of a

"traditional" dissertation. Moreover, because a graduate student and at least one reader typically co-author archival publications, it is particularly important to ensure that the student is primarily responsible for the initial draft of whatever prose from co-authored publications is incorporated into the dissertation.

The GRS has a number of detailed requirements for the format of the thesis document itself, including specifications of font size, margin widths, line spacing, etc., to ensure that your dissertation can be bound and distributed in a readable format. You will be asked to meet with a GRS representative to check that your document meets all of these requirements before the final copy can be turned in to the GRS.

Because of its length and complexity, substantial time is required to write and revise a dissertation. In order to ensure that your readers have adequate time to read, digest, and comment on the content of your dissertation prior to your oral defense, there are hard deadlines dictating the time between when readers are given a full, polished draft of your thesis and the allowable date of your oral defense. These deadlines are fully described in the timetables and checklists below (full draft to the primary reader at least six full weeks before the oral defense date; full, polished draft to the remaining readers at least two full weeks prior to the oral defense date). If these deadlines are not met, your oral defense will be delayed.

PhD Thesis Defense (Final Oral Examination)

Each student is expected to present a one-hour public lecture to the scientific community on his or her PhD research. The lecture should make clear the scholarly background before the work was started, what the problems are that the research investigated, why these problems are important, what the PhD results are, the extent to which these results solve the studied problems, and how these results compare with published research of other scientists in the field. This lecture is intended to show not only the student's research accomplishments, but also the student's ability to present scientific results in a professional way to the scientific community.

The lecture will be followed by questions from the student's PhD thesis committee, after which all members of the audience are free to ask questions. The length of the question period varies greatly, depending on the interests and curiosity of the audience and committee.

It is expected that a student will be allowed to defend his or her thesis only when his/her research has been approved by his/her thesis committee. Passing the defense requires both committee approval of the research and satisfactory fulfillment of the conditions listed above. The defense is an important part of the PhD process, and should be thoroughly prepared and practiced before the final presentation.

Thesis Committee

A CNS thesis committee consists of 3 readers, 2 reviewers, and a chair, who should be a resident CNS faculty member. Although the chair may be one of the reviewers, a committee of six is recommended. Normally the committee consists of CNS faculty members. If you wish to have a committee member who is not in CNS, please send Carol an email, well in advance. Include a brief description of why this person has been selected and other relevant information, such as dates when the outside committee member is available. If approved by CNS, you must then file a

special service appointment form with the Graduate School, if the proposed committee member does not hold a faculty appointment in the Graduate School of Arts and Sciences. PhD students planning to defend at any time in 2010-2011 are required to submit a list of three thesis readers to the department by the October 8, 2010 meeting.

Boston University

Graduate School
705 Commonwealth Avenue
Boston, Massachusetts 02215
617/353-2690

Office of the Dean

To: **Department Chairmen, Program Directors, and Directors of Graduate Studies**

From: **Christopher T. Baldwin,** Associate Dean, GRS

Date: August 8, 1991

Subject: Dissertation Outlines and Abstracts

Below is a summary of Graduate School guidelines to assist you in advising your students as they prepare their dissertation outlines and abstracts. I would be grateful if you would circulate copies of this memo to all of your Ph.D. graduate students.

I. **Dissertation Outline/Prospectus.** This is a document that must be submitted to the graduate school by the student upon successful completion of course requirements and qualifying examinations for a doctoral degree. It may be submitted as a prospectus or an outline. A prospectus or outline should constitute a detailed description, in clear, grammatical English, of the proposed dissertation. It should include a statement of the candidate's thesis and methodology, and a description of the proposed structure of the dissertation by chapter. An outline should provide a detailed summary of the proposed organization of the dissertation and indicate the primary and secondary topics to be discussed. The dissertation prospectus or outline must be accompanied by signatures indicating the approval of all the student's thesis readers and department or program chairman.

II. **Dissertation Abstract.** The GRS requires students to submit an abstract of the completed dissertation with the final oral examination schedule, two weeks before the exam date. Guidelines for preparing the abstract and the dissertation according to the requirements of University Microfilms International are distributed by the GRS to all doctoral candidates. Although students will have an opportunity to make final revisions to the abstract after the oral defense, they should not regard this first version as a "rough draft." It is the only version circulated by the GRS to the members of the examining committee, GRS, and Office of the Vice President. A final version of the abstract is submitted with the definitive version of the dissertation for publication in *Dissertation Abstracts International.*[1]

1) **Abstract Reviews.** The exercise of preparing the thesis abstract is not trivial. In essence the abstract enters the public domain in that it is published and widely circulated by *Dissertation Abstracts International* (see above). In some cases, it may be the only public manifestation of the research work, the thesis being held in the library at Boston University. This being the case, the University sets great store by the quality of the abstract. As a result, it is extensively reviewed, first by the Associate Dean of the Graduate School, and then by the Dean of the Graduate School, by the Office of the Executive Vice President and, in some cases, by the President.

2) **Abstract -vs- Introduction.** The different disciplines in the Graduate School require difficult styles of abstract. The University and the Graduate School respect these differences. However, no matter what the discipline, the abstract should be a concise summary of the ideas and results presented in the dissertation. This may include a brief statement which "sets the scene" and establishes the context of the new work. Care should be taken not to convert the abstract into a second introduction. Similarly, some notion of research methods and results should be included, but these should not repeat at great length material presented in the body of the thesis.

3) **Personal Contribution to Research.** The abstract should accurately reflect the candidates contribution to the research task. In some disciplines -- notably the biomedical sciences, other natural sciences, and certain social sciences -- it is common for graduate research work to be performed as part of a large research group. In these areas, it is normal for published work deriving from these groups to be presented as the results of the group. Thus, abstracts and papers frequently contain references to

* "the group" or reference in the third person plural ("we found that..."). This is not acceptable for a Ph.D. dissertation which should be the record of the individual's contribution. In some disciplines references in the first person ("I found that...") may be acceptable. In others they are not and some more neutral reference strategies should be employed ("It was found that..."). Whatever style is acceptable in the discipline should be employed consistently throughout the abstract.

** 4) **Advisor's approval of the abstract.** It is the candidate's responsibility to submit a draft or drafts of the abstract for review and approval by the supervisor. Clearly, the advisor needs adequate time in order to perform this "service." It has become apparent that in a significant number of cases this advisor review process is not executed properly. The signature on the GRS abstract cover sheet should signify that the content and style of the abstract meets the standards normally required of the discipline. It does not and should not signify that the advisor is aware that a draft of an abstract has been or will be submitted to the Graduate School. The editorial responsibility rests with the candidate along with the assistance and advice of the thesis advisor and other mentors. In order to speed up this important stage in the degree granting process, candidates should ensure that they seek the input of reviewers and editors prior to submitting their draft to the Graduate School.

CTB/baw

* Do not use "I" or "we" in the abstract.

** The abstract coversheet must be signed by (1) First Reader, (2) Director of Graduate Studies, and (3) Department Chair.

SAMPLE PROSPECTUS APPROVAL FORM

Instructions and form are located at: http://www.bu.edu/cas/pdfs/graduate/dissertation-prospectus.pdf.
CNS requires a third reader: Signature of third reader is NOT optional.
Please submit copy of completed form and copy of Prospectus to Carol.

Graduate School of ARTS·AND·SCIENCES

BOSTON UNIVERSITY • 705 Commonwealth Avenue, Boston, MA 02215

Dissertation Prospectus Approval Page

Please attach this page to the approved prospectus and submit it to the
Graduate School Records Office, Suite 112, 705 Commonwealth Avenue. (Please type or print clearly.)

NAME _____ BU ID _____

DEPARTMENT _____

PROPOSED TITLE OF DISSERTATION _____

_____

Language Examination _____ (Language) _____ (Date Passed)

Qualifying Examination _____ (Date Passed)

_____ (Student's Signature)

_____ (Date Prospectus Submitted to Department)

APPROVED BY

First Reader _____ (Name) _____ (Faculty Title)

_____ (Signature and Date)

Second Reader _____ (Name) _____ (Faculty Title)

_____ (Signature and Date)

Third Reader (optional) _____ (Name) _____ (Faculty Title)

_____ (Signature and Date)

Director of Graduate Studies _____ (Name) _____ (Signature and Date)

Department Chairman _____ (Name) _____ (Signature and Date)

Received by Graduate School Records _____

2

SAMPLE SPECIAL SERVICE APPOINTMENT FORM

This form must be filed for a non-GRS faculty member to serve on a GRS PhD dissertation committee. This form will also be used in rare cases when the department has approved a non-CNS faculty member to serve as first reader due to unusual circumstances (write in first reader). Form and instructions: http://www.bu.edu/cas/pdfs/graduate/SpecialServiceAppointmentForm.pdf.

BOSTON UNIVERSITY GRADUATE SCHOOL OF ARTS AND SCIENCES
Office of the Associate Dean
705 Commonwealth Avenue, Room 112

REQUEST FOR A SPECIAL SERVICE APPOINTMENT IN THE GRADUATE SCHOOL

Please provide the following information when requesting a *Special Service Appointment* for a person who will serve as a reader on a doctoral dissertation or a master's thesis, or who will serve as a member of a Final Oral Examining Committee (dissertation defense). **Please type. (Please return to the Office of the Associate Dean, Room 112.)**

_____ _____
Name of Student Department

_____ Degree: ____ **M.A.** ____ **Ph.D.**
Name of Nominee*

Committee as now composed:

_____ _____
_____ _____
_____ _____
_____ _____
Nominee's Mailing Address

* A current **curriculum vitae** of the nominee must accompany this request.

Appointment:
____ *Second Reader*—Ph.D. Dissertation ____ *Third Reader*—Ph.D. Dissertation
____ *Second Reader*—M.A. Thesis ____ *Third Reader*—M.A. Thesis
____ Member of Ph.D. Final Oral Examining Committee
____ Member of M.A. Thesis Examining Committee

Reasons for this request:

_____ _____
Signature of *Department Chairman* or *Director of Graduate Studies* Date

……

____ Approved ____ Not Approved

_____ _____
Associate Dean, Graduate School Date

____Dean' s copy _____Record's copy _____Student's copy _____Department's copy

SAMPLE DISSERTATION ABSTRACT APPROVAL FORM

Form is located at: http://www.bu.edu/cas/pdfs/graduate/dissertation-defense-abstract.pdf. Please submit copy of completed form and abstract to Carol.

Graduate School of ARTS·AND·SCIENCES

BOSTON UNIVERSITY ▪ 705 Commonwealth Avenue, Boston, MA 02215

Doctoral Dissertation Defense Abstract

This form must be submitted to the **Graduate School of Arts and Sciences Records Office, Suite 112,** with one copy of the dissertation abstract (maximum of 350 words) at least **three weeks** in advance of the defense of the dissertation. The proper heading of the dissertation abstract must be printed at the top of the abstract. **Prior to submission, the abstract must have been read and approved by your Major Professor, the Director of Graduate Studies, and the Department Chairman.** The student will be notified of the approval of the abstract or if revisions are required. Upon final approval by the Graduate School of Arts and Sciences, the Schedule of the Final Oral Examination (dissertation defense) and fourteen copies of the approved abstract must be submitted to the Records Office. These must be received at least two weeks in advance of the defense date. Please type or print clearly.

Name _____ BU ID _____

Department _____ Tentative Date of Defense _____

Daytime Telephone Number _____ Evening Telephone Number _____ E-mail Address _____

DEPARTMENTAL REVIEW OF THE DISSERTATION ABSTRACT
Abstract read and approved by:

Signature, Major Professor _____ Date _____

Signature, Director of Graduate Studies _____ Date _____

Signature, Department/Division Chairman _____ Date _____

GRADUATE SCHOOL REVIEW OF THE DISSERTATION ABSTRACT Date Received by GRS _____

Dean's review and recommendations _____

_____

_____ Initials _____

REVIEW OF THE REVISED DISSERTATION ABSTRACT Date Received by GRS _____

Dean's review and recommendations _____

_____

_____ Initials _____

SAMPLE ORAL EXAM SCHEDULE FORM

Instructions and form are located at: http://www.bu.edu/cas/pdfs/graduate/oralexam.pdf.
Note: The CNS department requires a third reader: Signature of third reader is NOT optional.
Please submit copy of completed form to Carol.

Graduate School of ARTS·AND·SCIENCES

BOSTON UNIVERSITY ▪ 705 Commonwealth Avenue, Boston, MA 02215

Schedule of the Final Oral Examination for the Degree of Doctor of Philosophy

Arrangements for a Final Oral Examination (Dissertation Defense) are the responsibility of the individual department, division, or program. Please see information page for instructions pertinent to the scheduling of this examination.
Please type this form or print clearly.

CANDIDATE _____

BU ID _____ **E-MAIL ADDRESS** _____

DEPARTMENT, DIVISION, OR PROGRAM _____

TITLE OF DISSERTATION _____

_____

_____

_____

DATE, TIME, AND PLACE OF EXAMINATION (include room number, building/department, and street address where defense will take place) _____

_____

EXAMINING COMMITTEE (Minimum of five who have agreed to serve at the designated time)
Please provide addresses of committee members, if different from the department of the student.

First Reader _____ Name _____ Faculty Title

Second Reader _____ Name _____ Faculty Title

Third Reader (optional) _____ Name _____ Faculty Title

Chairman of Examining Committee (other than a reader)

_____ Name _____ Faculty Title

_____ Telephone Extension

Additional Committee Members

_____ Name _____ Faculty Title

_____ Name _____ Faculty Title

_____ **SIGNATURE, DEPARTMENT CHAIRMAN** _____ **DATE**

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SAMPLE PhD DIPOLMA APPLICATION FORM

Instructions and forms are located at: http://www.bu.edu/cas/pdfs/graduate/phd-diploma-app.pdf.

Graduate School of ARTS·AND·SCIENCES

BOSTON UNIVERSITY ▪ 705 Commonwealth Avenue, Boston, MA 02215

DIPLOMA APPLICATION FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Please return this form to the Graduate School Office, Room 112, 705 Commonwealth Avenue, Boston, MA 02215. Deadlines are the following: NOVEMBER 1 for JANUARY GRADUATION; FEBRUARY 1 for MAY GRADUATION. ***This diploma application is valid only for the *graduation date specified below; a new application must be filled out and submitted to the Graduate School if the student does not graduate as planned.*** *A student must be registered in the semester in which degree requirements are completed* ***and*** *in the preceding semester.*

NAME _____
First Middle Last

After your are notified by the Graduate School that you have been added to the tentative list of graduates, you will receive an E-mail message from the Registrar's Office. You will be asked to confirm or, if you wish, to change how you would like your name to be printed on your diploma.

BU ID U _ _ _ _ _ _ _ _ _ TELEPHONE NO. _____

CURRENT ADDRESS _____ E-MAIL _____

_____
ZIP CODE

_____ _____ _____
MAJOR FIELDS *(see list of major fields and codes)* CODE NUMBER MAJOR ADVISOR

DEGREE PROGRAM: ☐ Post-Master's PhD (8 or 12 courses) ☐ Post-Bachelor's PhD (16 or more courses) _____
*EXPECTED GRADUATION DATE

PREVIOUS DEGREE(S) EARNED, INSTITUTION(S) DATES(S) AWARDED _____
_____
Print abbreviation of each previous degree earned as it appears on the official transcript

Each student must fulfill all requirements for the degree of Doctor of Philosophy as published in the Graduate School of Arts and Sciences Bulletin. Refer to the Policies and Procedures section of the bulletin and to the departmental section for the specific requirements of your degree program. Please indicate in the following section whether or nor each requirement has been satisfied and use the line to the right to provide information as to when an outstanding requirement will be completed.

	SATISFIED	NOT SATISFIED (indicate below when requirement will be satisfied)		
All courses required to satisfy departmental course requirements	☐	☐	_____	
Language Examination: Please specify language(s) _____	☐	☐	_____	☐ NOT REQUIRED
Qualifying Examination	☐	☐	_____	
Proposal/Prospectus/Outline approved by department and submitted to Graduate School	☐	☐	_____	

Date or approximate date of the defense of the dissertation _____

If the final signed copies of the dissertation have been submitted to the Graduate School, indicate date of submission _____

Information you think would be helpful when your record is being reviewed (optional):

STUDENT'S SIGNATURE _____ DATE _____

SAMPLE MA DIPOLMA APPLICATION FORM

Instructions and forms are located at: http://www.bu.edu/cas/pdfs/graduate/ma-diploma-app.pdf.

Graduate School of ARTS·AND·SCIENCES

BOSTON UNIVERSITY ▪ 705 Commonwealth Avenue, Boston, MA 02215

DIPLOMA APPLICATION FOR THE DEGREE OF MASTER OF ARTS

Please return this form to the Graduate School Office, Room 112, 705 Commonwealth Avenue, Boston, MA 02215. Deadlines are the following: NOVEMBER 1 for JANUARY GRADUATION; FEBRUARY 1 for MAY GRADUATION; JULY 1 for SEPTEMBER GRADUATION. ***This diploma application is valid only for the *graduation date specified below; a new application must be filled out and submitted to the Graduate School if the student does not graduate as planned.*** *A student must be registered in the semester in which degree requirements are completed and in the preceding semester.*

NAME _____
First Middle Last

After your are notified by the Graduate School that you have been added to the tentative list of graduates, you will receive an E-mail message from the Registrar's Office. You will be asked to confirm or, if you wish, to change how you would like your name to be printed on your diploma.

BU ID U _ _ _ _ _ _ _ _ _

*EXPECTED GRADUATION DATE _____

CURRENT ADDRESS _____

E-MAIL _____

ZIP CODE

TELEPHONE NO. _____

MAJOR FIELD (*see list of major fields and codes*) _____ CODE NUMBER _____ MAJOR ADVISOR _____

DEGREE PROGRAM: ☐ MA (32 or more credits) ☐ MS ☐ BA/MA (144 or more credits) ☐ MA/MBA (80 or more credits) ☐ JD/MA (consult JD/MA program advisor) ☐ Post-Bachelor's PhD (for the MA, complete a minimum of 32 credits)

PREVIOUS DEGREE(S) EARNED, INSTITUTION(S), DATE(S) AWARDED _____
Print abbreviation of each previous degree earned as it appears on the official transcript.

LIST CURRENT SEMESTER COURSES: Title Course Number Credit Hours

Each student must fulfill all requirements for the degree of Master of Arts as published in the Graduate School of Arts and Sciences Bulletin. Refer to the Policies and Procedures section of the bulletin and to the departmental section for the specific requirements of your degree program. Please indicate in the following section whether or not each requirement has been satisfied and use the line to the right to provide information as to when an outstanding requirement will be completed.

	SATISFIED	NOT SATISFIED		NOT REQUIRED
Language requirement** _____ (Language) satisfied by: ☐ examination ☐ course work ☐ English (International students)	☐	☐	_____ When will language be satisfied?	☐
Comprehensive Examination	☐	☐	_____ When will exam be taken?	☐
Thesis	☐	☐	_____ When will thesis be submitted to GRS?	☐
Other _____ i.e., master's project, scholarly paper, library paper, policy paper, internship, etc.	☐	☐	_____ When will it be submitted to department?	

***Proficiency in a foreign language is a requirement for the Master of Arts degree in some fields of the Graduate School. It may be satisfied by examination or coursework (at least one academic year of an intermediate level language). If a department permits, an international student may satisfy the foreign language requirement with English. Please refer to your department's section of the GRS Bulletin for information pertaining to the language requirement.*

STUDENT'S SIGNATURE _____ DATE _____

Calendar of Graduation Milestones

From the start, each student should keep a projected schedule of courses and other requirements for purposes of making important decisions. In so doing, you should keep in mind certain constraints. Many of these are described in the Graduate School (GRS) Bulletin; for example, for the PhD you must have completed all courses and passed the qualifying exam before turning in a dissertation prospectus. Also, a candidate must be registered for the semester in which degree requirements are completed and during the preceding semester. (There may be a small grace period allowed here. Check with Carol or with GRS for exact dates.)

Students are strongly advised to review graduation milestones with Martha Wellman Khan (3-2694) in the GRS Records Office.

On the following pages is a schedule of deadlines that applies to students who will receive degrees in 2010–2011. All students should note how far in advance some of the milestones might need to be reached. In particular, you need to work with your thesis advisor to schedule a tentative date for a PhD defense **at least 12 weeks in advance**. Note that scheduling a defense date this far in advance allows you and your committee to reserve a time. It does not constitute a guarantee that you will be ready to defend by that date. The thesis committee may, at any time, require that the defense be postponed.

An anomaly of the graduation calendar is that MA degrees are awarded each year in January, May, and September, while PhD degrees are awarded only in January and May. Because many PhD students complete their requirements during the summer, a schedule of milestones is also included for "September" PhD graduation, although the degree would not be awarded until the following January. From the CNS Department's perspective, these dates are just as important and immovable as the January and May dates. In addition, students completing requirements by September should check with thesis committee members long in advance to see when they will be traveling during the summer.

PhD DEGREE CANDIDATES 2011 GRADUATION CALENDAR

To be completed within 7 years from entry (post-bachelor's) or 5 years from entry (post-master's).
A candidate must be registered for the fall, spring, or summer term in which degree requirements are completed and during the preceding term.

	Award Date	**Jan 25, 2011**	**May 22, 2011**	**Sept 25, 2011**
Action	**General rule**	**(Final possible date) / Absolute deadline**		
2nd and 3rd reader identified and approved (with 1st reader)	16 weeks before PDD	(Dec 10, 2009)	(June 11, 2010)	(Oct 22, 2010)
Prospectus to 1st reader	8 weeks before PDD	(Feb 5, 2010)	(Aug 6, 2010)	(Dec 17, 2010)
Prospectus to 2nd and 3rd readers	4 weeks before PDD	(March 5, 2010)	(Sept 3, 2010)	(Jan 14, 2011)
Prospectus to DGS and Chair	2 weeks before PDD	(March 19, 2010)	(Sept 17, 2010)	(Jan 28, 2011)
Prospectus Due Date (PDD) to GRS		**Apr 2, 2010**	**Oct 1, 2010**	Feb 11, 2011
Full draft dissertation to 1st reader	15 weeks before FOE	(Sept 3, 2010)	(Jan 3, 2011)	(May 20, 2011)
Schedule defense date (CNS Section 1 form)	12 weeks before FOE	(Sept 24, 2010)	(Jan 21, 2011)	(Jun 10, 2011)
Full draft dissertation to all readers	10 weeks before FOE	**Oct 1, 2010**	**Feb 4, 2011**	Jun 24, 2011
Diploma application to GRS		**Nov 1, 2010**	**Feb 1, 2011**	With dissertation
Confirm defense date; Abstract to 1st reader (CNS Section 2 form)	8 weeks before FOE	(Oct 22, 2010)	(Feb 18, 2011)	(Jul 8, 2011)
Abstract to three readers; Polished dissertation to 1st reader (CNS Section 3 form)	6 weeks before FOE	(Nov 5, 2010)	(Mar 4, 2011)	(Jul 22, 2011)
Abstract to DGS and Chair (CNS Section 4 form)	4 weeks before FOE	(Nov 19, 2010)	(Mar 18, 2011)	(Aug 5, 2011)
Abstract to GRS Office; Meet with Martha Wellman Khan to review grad procedures	**3 weeks before FOE**	(Nov 26, 2010)	(Mar 25, 2011)	(Aug 12, 2011)
Confirm defense date (Schedule form to GRS); Polished draft dissertation to all readers	**2 weeks before FOE**	(Dec 3, 2010)	(Apr 1, 2011)	(Aug 19, 2011)
Corrected dissertation copy to readers	Day of FOE	(Dec 17, 2010)	(Apr 15, 2011)	(Sept 2, 2011)
Final Oral Exam Deadline (FOE)		**Dec 17, 2010**	**Apr 15, 2011**	**Sept 2, 2011***
Final dissertation to GRS		**Dec 17, 2010**	**Apr 15, 2011**	**Last *ADD* date Fall 2011 term**

*Date must be prior to the start of fall classes. For international students, date must also comply with ISSO regulations.

MA DEGREE CANDIDATES
2011 GRADUATION CALENDAR

To be completed within 3 years from entry.

A candidate must be registered for the fall, spring, or summer term in which degree requirements are completed and during the preceding term.

	Jan. 25, 2011 Award	**May 22, 2011 Award**	**Sept. 25, 2011 Award**
*Diploma application due in GRS office (forms available in GRS office)	Nov. 1, 2010	Feb. 1, 2011	July 1, 2011

* The diploma application is valid only for the graduation date specified. A new application must be filed if the student does not graduate as planned.

STUDENT NAME:_____ DEFENSE DATE:_____

Checklist for all graduating PhD students, Department of Cognitive and Neural Systems:

A copy of each form from this checklist must be completed and given to Carol by the date specified at the bottom of the form. You may keep the original forms in your Handbook.

Below is a CNS Department worksheet that the faculty and staff have put together to help you negotiate some of the steps you need to take to complete your degree requirements. In a number of places you will need to obtain faculty signatures. Be sure to take into account faculty travel, especially in the summer. Also keep in mind that faculty may be working with several graduating students, and have other obligations as well.

You will need to meet a series of deadlines in order to ensure that your degree requirements will be completed on time. All of this is in addition to the actual research and writing. We send you good wishes for reaching this goal.

The seven sections below outline steps toward submitting your abstract and scheduling your defense. Information here does NOT duplicate all instructions, requirements, and deadlines outlined in other sources, including the CNS Handbook and the GRS Bulletin. You are responsible for finding out what is required and for meeting these requirements on time. You will need to complete each section before moving on to the next one. You should work closely with your First Reader throughout the process.

Calendar of deadlines [fill in dates here, and in all later sections]

——————— **12 weeks before defense date [consult with readers 2 and 3; schedule defens date]**

——————— **8 weeks before defense date [confirm date; draft abstract]**

——————— **6 weeks before defense date [abstract to 3 readers; full draft to first reader]**

——————— **4 weeks before defense date [approved abstract to Barb and Ennio; substantive content to all readers]**

——————— **3 weeks before defense date [final abstract to GRS]**

——————— **2 weeks before defense date [confirm defense date]**

SIGNATURE: First reader _____

STUDENT NAME:_____ DEFENSE DATE:_____

SECTION 1

SIGNATURE: First reader _____

At least 12 weeks before defense date:

[schedule date/time]

_____ [fill in date] 12 weeks before defense date

_____ **Tentative** dissertation defense date

_____ Defense time [10:00AM or 2:00PM]

Dissertation title: _____

_____

[**consult with readers 2 and 3]**

I have seen a draft of the student's PhD abstract. Based on discussion with student and/or first reader, I believe that (1) the thesis research is nearly complete and (2) the writing is on track for the student to provide a polished dissertation draft to all readers at least 2 weeks prior to the defense date.

SIGNATURE: Second reader _____

SIGNATURE: Third reader _____

<u>NOW</u>: GIVE A COPY OF YOUR COMPLETED AND SIGNED SECTION 1 TO CAROL.

END SECTION 1 – COMPLETE BY _____ [12 week date]

STUDENT NAME:_____ DEFENSE DATE:_____

SECTION 2

I have confirmed the tentative dissertation defense date with my entire thesis committee (3 readers, 2 reviewers, chair) and with Carol and Barb, as checked on the following list [fill in names]:

☐ First reader: _____

☐ Second reader: _____

☐ Third reader: _____

☐ Reviewer 1: _____

☐ Reviewer 2: _____

☐ Committee chair: _____
(chair may be one of the two reviewers but not a reader)

☐ Carol Jefferson [CNS administrator]

☐ Barbara Shinn-Cunningham [CNS director of graduate studies]

_____ If one or more members of my committee is not a CNS faculty member, I have filed all the required materials to obtain CNS and GRS approval.

_____ I have read all sections of the CNS Handbook and GRS Bulletin regarding graduation requirements and have noted the schedule of deadlines, which I must meet to defend my dissertation by the above date. These deadlines include, but are not limited to, deadlines outlined on this checklist.

_____ I have begun to work with my three readers on the draft text of my dissertation, which I expect to be revised and in final form before my dissertation defense date.

_____ I have begun to work with my first reader on the text of my thesis abstract.

<u>NOW</u>: GIVE A COPY OF YOUR COMPLETED SECTION 2 TO CAROL.

END SECTION 2 – COMPLETE BY _____ [8 week date]

STUDENT NAME: _____ DEFENSE DATE: _____

SECTION 3

At least 6 weeks before defense date [abstract to 3 readers]

_____ [fill in date] – 6 weeks before defense date

NOTE: The PhD dissertation abstract is an important document that will be circulated to a wide audience, inside and outside the University. You should write for an audience that is literate but that is not necessarily familiar with your research field. It may be helpful to imagine talking to a Dean [who will, in fact, be reading your abstract], explaining your topic, why it is interesting, and how your work advances knowledge. Avoid technical details, literature citations, and the first person [I or we]. Proofread carefully, and ask for help when you need it.

☐ I have worked with my first reader to complete a polished draft of my dissertation abstract, observing style requirements and the 350-word limit. My first reader is also confident that I will be ready to defend my thesis by the tentative date, as noted below.

FIRST READER: I have approved a polished draft of this student's PhD abstract. I hereby note that the thesis research is now essentially complete. In addition, the writing is nearly complete. A polished dissertation draft text should be available to all readers, for comment and revisions, at least two weeks before the tentative defense date.

_____ _____

[First reader – signature] [Date]

☐ I have given the polished draft of my dissertation abstract, along with a copy of this checklist, to my three readers.

<u>NOW</u>: GIVE A COPY OF YOUR COMPLETED SECTION 3 TO CAROL.

END SECTION 3 – COMPLETE BY _____ [6 week date]

STUDENT NAME: _____ DEFENSE DATE: _____

SECTION 4

At least 4 weeks before defense date [approved abstract to Barb and Ennio]

_____ [fill in date] 4 weeks before defense date

My three readers have read, approved, and agreed upon a final, polished version of my abstract, as noted below. The abstract is now ready for final CNS Departmental approval.

FIRST READER: I have approved a polished draft of this student's PhD abstract, in consultation with the other readers. I hereby note that both the thesis research and a draft dissertation are now *complete*. A polished dissertation draft text should be available to all readers, for comment and revisions, at least two weeks before the tentative defense date. Finally, I have signed the GRS "PhD Dissertation Defense Abstract" cover sheet as "Major Professor."

_____ _____
[First reader – signature] [Date]

SECOND READER: I have approved a polished draft of this student's PhD abstract, in consultation with the other readers. I have also read substantial portions of the dissertation text and expect that the defense will be held on the tentative scheduled date.

_____ _____
[Second reader – signature] [Date]

THIRD READER: I have approved a polished draft of this student's PhD abstract, in consultation with the other readers. I have also read substantial portions of the dissertation text and expect that the defense will be held on the tentative scheduled date.

_____ _____
[Third reader – signature] [Date]

<u>Now</u>: Give copies of this signed document, along with copies of the abstract and the GRS "PhD Dissertation Defense Abstract" cover sheet [<u>typed</u> and signed by your first reader] TO BARBARA SHINN-CUNNINGHAM [as director of graduate studies] AND TO ENNIO MINGOLLA [as chair].

GIVE A COPY OF YOUR COMPLETED SECTION 4 TO CAROL.

END SECTION 4 – COMPLETE BY _____ [4 week date]

STUDENT NAME: _____ DEFENSE DATE: _____

SECTION 5

At least 3 weeks before defense date [abstract to GRS]

_____ [fill in date] – 3 weeks before defense date

☐ I have worked with Barb, Ennio, and my three readers to reach consensus on the final abstract text.

☐ Barb and Ennio have signed the official GRS abstract cover sheet.

☐ I have turned in the signed abstract cover sheet and my thesis abstract to the GRS, for approval by the Dean, who may request further revisions.

☐ I have turned in an updated copy of my thesis abstract to Carol, *along with a copy of my signed abstract cover sheet*.

☐ I have met with Martha Khan, in the Graduate School Records Office, to review my graduation requirements.

<u>NOW</u>: GIVE A COPY OF YOUR COMPLETED SECTION 5 TO CAROL.

END SECTION 5 – COMPLETE BY _____ [3 week date]

STUDENT NAME: _____ DEFENSE DATE: _____

SECTION 6

At least 2 weeks before defense date [confirm defense date]

_____ [fill in date] – 2 weeks before defense date

☐ I have received notification from the GRS of final approval of my abstract.

☐ My first reader, in consultation with the rest of my committee, has approved the final scheduling of my defense, on:

_____ _____
[date] [time – 10:00 AM or 2:00 PM]

☐ I have reconfirmed the above time with all my committee members (3 readers, 2 reviewers, and chair).

☐ I have submitted a polished draft of my dissertation to my 3 readers, in preparation for final revisions.

☐ I have submitted to the GRS Records Office the "Schedule of the Final Oral Examination" (dissertation defense) form and 14 copies of the approved abstract.

☐ I have re-checked the CNS Handbook and the GRS bulletin, to be sure I have met all requirements.

<u>NOW</u>: GIVE A COPY OF YOUR COMPLETED SECTION 6 TO CAROL.

END SECTION 6 – COMPLETE BY _____ [2 week date]

STUDENT NAME: _____ DEFENSE DATE: _____

SECTION 7

On the defense date.

_____ Bring two copies of your signature page printed on thesis quality bond.

If your readers have not yet approved the final draft of your dissertation, be sure that each has an up-to-date copy.

Prepare your one-hour lecture in colloquium style. Practice your talk with friends. Family and friends are invited and welcome to your defense.

_____ Provide Robin Amos with an electronic copy (.pdf preferred) of your dissertation in its final format, as submitted to GRS for microfilming and binding.

Congratulations, you are about to become a CNS alumnus/alumna.

_____Be sure to remove all of your belongings from your office, return your room keys and let us know your next email address, so you can join the CNS alumni listing.

We hope you'll return for colloquia, parties, and visiting. Please let us know about your work, marriage, babies, new addresses, etc.

Please fill out the Alumni Information Form on the following page and submit it to Robin.

CNS Alumni Information Form

(Please return form to Robin Amos, Room 201)

Name: _____

Graduation date: _____

Degree: _____

Work Information

Company name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

Website: _____

Job title: _____

Job description:

_____

_____

_____

_____

Home Information

Address: _____

Phone: _____

Email: _____

Thank you. Your feedback is appreciated. It is important to the department to be able to follow the professional activities of its graduates. Post-graduation employment information is used statistically in reports and funding applications and provides current and prospective students with valuable employment outcome data. The CNS Alumni List, which contains professional affiliation and job description information, is available to members of the CNS community upon request. Personal information is not shared.