BYU Neuroscience Center

COLLEGE OF LIFE SCIENCES

NEUROSCIENCE GRADUATE STUDENT HANDBOOK

2023-2024

Updated December 2023

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NEUROSCIENCE GRADUATE STUDENT HANDBOOK

I. ORGANIZATION OF NEUROSCIENCE CENTER

1. Welcome from the Faculty

Welcome to the graduate program in Neuroscience at Brigham Young University! We welcome you as a friend and colleague joining us in the development and advancement of the discipline. We want you to feel accepted and comfortable at the University and in the community. If you have any difficulties with which we can help, please let us know. When you were admitted to the graduate program, you were sent an acceptance letter from the Neuroscience Graduate Program Coordinator with information regarding your program start-time, expectations and, in some cases, an outline of pre-requisite courses as provision for continuance in the program. You were also assigned a Faculty Mentor. If you have questions or need additional information, please talk to your assigned Faculty Mentor first. If you need further assistance, please contact the Graduate Program Coordinator or Graduate Program Supervisor (see contact info below).

2. Center Administration

The Neuroscience Center is in the College of Life Sciences. Within the Neuroscience Center there are typically about 26 full-time faculty, two staff members, over 600 undergraduate majors, and about a dozen graduate students. Graduate degrees in Neuroscience are offered at both the MS and PhD level. Neuroscience faculty members are listed below (Note: teaching faculty cannot serve as student committee chairs but can serve as committee members). The Director of the Neuroscience Center is Dr. Jeff Edwards, with Dr. Shawn Gale as the Associate Director. Dr. Arminda Suli serves as the Graduate Program Coordinator and Heidi Jensen is the Graduate Program Supervisor. The Center Director reports to the Dean of Life Sciences, who is assisted by Associate Deans and Assistant Deans. One of the Associate Deans has specific responsibility for graduate programs in the college. Administrative staff oversees the Neuroscience Center, which is located at S-192 ESC.

3. Office Management and Personnel

Dean	Laura Bridgewater	5013 LSB	801-422-3963
Director	Jeff Edwards	3046 LSB	801-422-6636
Associate Director	Shawn Gale	1060 KMBL	801-422-9757
Graduate Program Coordinator	Arminda Suli	3048 LSB	801-422-2646
Graduate Program Supervisor	Heidi Jensen	ESC S192B	801-422-8633
Office Manager	Rebecca Daines	ESC S192A	801-422-7860
Student Office Specialists		ESC S192	801-422-1218

4. Neuroscience Center Faculty

Stefani Ashby, *Assistant Professor, Psychology:* PhD, University of Oregon, 2021. Memory and misinformation and retractions.

*Michael D. Brown, Teaching Professor, Cell Biology and Physiology: PhD, Colorado State University, 1999. Regulation of Axon and Dendrite Extension and Pathfinding during Nervous System Development.

Steven Charles, Associate Professor, Mechanical Engineering: PhD, Harvard-Massachusetts Institute of Technology, 2008. Biomechanics and Neural Control of Movement; Tremor; Assistive Technology.

Derin J. Cobia, *Assistant Professor*, *Psychology:* PhD, St Louis University, 2008. Neuropsychology; Neuroimaging; Psychosis; Dementia.

Garrett Cardon, *Assistant Professor, Communication Disorders:* PhD, University of Colorado at Boulder, 2015. Neurophsyiologic and behavior correlates of sensory processing in Autism Spectrum Disorder; neural plasticity; hearing loss.

Jeff G. Edwards, *Professor, Cell Biology and Physiology:* PhD, University of Utah, 2003. Synaptic Plasticity Neurophysiology: Memory and Addiction Mechanisms.

Shawn D. Gale, *Associate Professor, Psychology:* PhD, Brigham Young University, 1994. Neuropsychology; Brain-Behavior Relationship; Neuroimaging.

Dawson W. Hedges, *Professor, Psychology:* MD, University of Utah, 1998. Psychiatry; Neuroscience; Electroencephalography.

Julianne Holt-Lunstad, *Professor*, *Psychology:* PhD, University of Utah, 2001. Social Relationship; Stress and Coping; Psychoneuroendocrinology; Psychophysiology; Health Psychology.

Ramona O. Hopkins, *Professor, Psychology:* PhD, University of Utah, 1996. Neuroimaging; Brain Behavior Relationships; Cognitive and Psychological Outcomes due to Critical Illness, Hypoxia/Ischemia; Family Stress due to Illness.

Daniel B. Kay, *Assistant Professor, Psychology:* PhD, University of Florida, 2008. Sleep; Cognition; Mood; Aging.

C. Brock Kirwan, *Professor, Psychology:* PhD, Johns Hopkins University, 2006. Memory; Amnesia; Functional Neuroimaging.

Michael J. Larson, *Professor*, *Psychology*: PhD, University of Florida, 2008. Neuropsychology; Cognitive Neuroscience; Neuroimaging; Cognitive Changes Following Traumatic Brain Injury; Cognitive Processes in Psychopathology such as obsessive-compulsive disorder.

Steven G. Luke, *Associate Professor, Psychology:* PhD, University of Illinois at Urbana-Champaign, 2011. Language Processing; Vision; Reading: Eye Movements.

Rebecca A. Lundwall, *Associate Professor, Psychology:* PhD, Rice University, 2013. Attentional Development; Genetics: Gene-by-Environment Interactions; Cognitive Neuroscience.

*Rebekka Matheson, Teaching Assistant Professor, Psychology: MD, University of Rochester, 2013. Neuroanatomy of Reward Systems, Addiction Medicine; Neuropsychiatry; Biopsychosocial Approach in Medicine; Scientific Pedagogy.

Tricia Merkley, *Assistant Professor*, *Psychology*: PhD, Brigham Young University, 2012. Neuropsychology, Neuroimaging, & Traumatic Brain Injury.

Jared Nielsen, *Assistant Professor, Psychology:* PhD, University of Utah, 2013. Brain organization: How neurological and psychiatric illness disrupt brain organization.

R. Ryley Parrish, *Assistant Professor, Cell Biology and Physiology:* PhD, University of Alabama, 2014. Epilepsy; Mechanisms of seizure propagation and termination; Pharmacoresistant; Prolonged seizure activity.

Chris L. Porter, *Associate Professor, School of Family Life:* PhD, Purdue University-West Lafayette, 1996. Child Development; Socialization: Behavioral and Psychophysiological Components of temperament and Emotionality; EEG and ERP, Childhood attachment; Emotional, Behavioral and Biological Reactivity.

Perry Ridge, *Associate Professor*, *Biology*: PhD, Brigham Young University, 2013. Bioinformatics, Computational Biology, Genetics, Genome Biology, Alzheimer's Disease.

Michael R. Stark, *Professor, Cell Biology and Physiology:* PhD, University of California, Irvine, 1998. Neural tube development; Neuronal cell-fate determination.

Sterling N. Sudweeks, Associate Professor, Cell Biology and Physiology PhD, University of Utah, 1997. Pharmacology of the Nervous System; Ion Channels.

Arminda Suli, Associate Professor, Cell Biology and Physiology: PhD, University of Utah, 1999. Neural Circuitry Development; Genetic approaches, live imaging and behavior.

Seth Taylor, Assistant Professor, Cell Biology and Physiology: PhD, Yale University, 2014. Confocal Microscopy, Single-cell RNA Sequencing, and Cellular Neuroscience.

Dixon J. Woodbury, *Professor, Cell Biology and Physiology:* PhD, University of California, Irvine, 1986. Molecular Mechanisms of Exocytosis and their modulation by alcohols; Neuroscience of Transmitter Release.

Jordan Yorgason, *Assistant Professor*, *Cell Biology and Physiology*: PhD, Wake Forrest University, 2013. Neurobiology of stress and addiction; Electrophysiology and dopamine neurochemistry.

* Teaching professors may NOT serve as Committee Chair for Neuroscience Graduate Students but can serve as committee members.

5. Yearly Events

July: Rawlinson Scholarship Due August/September: Opening Social

October: Student Luncheon

November: Society for Neuroscience January: Progress Review Due

February: 3 Minute Thesis Competition April: Graduate Student Appreciation Week

May: Progress Review Due

I. OVERVIEW OF GRADUATE PROGRAMS

6. Neuroscience Graduate Programs

Neuroscience is a multidisciplinary science that studies the development of the nervous system, its structure and function and its connection to influencing/regulating behavior. Graduate programs in Neuroscience offer research training and classroom instruction in a wide range of topics:

- 1. Cellular and molecular neuroscience including neuroendocrinology, endocrine and immune interactions, development of the central nervous system, hereditary connective tissue disorders, animal models of development, exercise physiology and glucose metabolism, membrane transport and channel structure, synaptic vesicle recycling, and motor function.
- 2. Behavioral neuroscience including memory, neuroimaging, visual processing, sleep, event related potentials of language development, traumatic brain injury, autism, child development, social relationships and health, cognitive and psychological outcomes of neurological and neuropsychiatric disorders.

The graduate neuroscience **Masters (MS)** degree program is designed to obtain a sound understanding of, and advanced knowledge and training in, current concepts in neuroscience. The program prepares students for positions in research, academia, and industry. The thesis research project teaches the fundamentals of scientific inquiry and trains the students in state-of-the-art research techniques. Submission of the thesis to a peer-reviewed journal is encouraged, but not required.

The **Doctoral** (**PhD**) degree program offers lecture and laboratory courses and research that emphasizes the multidisciplinary nature of neuroscience. Students in the program are required to gain a strong background in the principles of neuroscience and the knowledge and technical expertise necessary in their area of specialization. The program is designed to provide advanced training and research to develop and carry out original research, present findings at meetings and conferences, and teach neuroscience. Eventual publication of the research in peer-reviewed journals is expected, but not required.

7. General Information

These guidelines were prepared for the graduate student in Neuroscience and must be used in conjunction with those contained in the graduate section of the BYU General Catalog. The graduate student must keep current on changes made each year in the graduate program, at both the Department and the University level. The ultimate responsibility to comply with all Center and University requirements rests with the student. Petitions requesting

exceptions to graduate policy must be originated with the Graduate Program Supervisor, who will start the online process.

8. Mentor Selection

MS Students

Admitted students will be assigned a Faculty Mentor, selected from the faculty the applicant requested in their application, who will serve as the student's Graduate Advisory Committee Chair throughout the program. There is no guarantee of funding (such as stipend and tuition) for MS students. Prospective Faculty Mentors need to commit to lab space and research resources.

PhD Students

Admitted students will be assigned a Faculty Mentor, selected from the faculty the applicant requested in their application. The Faculty Mentor may or may not serve as the Graduate Advisory Committee Chair throughout the program. To provide a broad exposure to faculty research interests, PhD students must complete 2-3 laboratory rotations (duration of 2-4 months), preferably in the first year of the program. One of the rotations could occur in the lab of the initially appointed Faculty Mentor, where the student could conduct their dissertation research. However, after completing rotations the student may want to complete their dissertation research with a faculty other than the initially appointed Faculty Mentor. The new Faculty Mentor, in which the student will complete their dissertation research, will then become their Graduate Advisory Committee Chair. In connection with these rotations, students will enroll in Neuro 649R (Lab Rotation) for two semesters (2.0 credit hours each). Laboratory rotations consist of active participation in the lab, with a minimum time commitment of 10 hours per week. The student is responsible for choosing rotation laboratories in consultation with their Faculty Mentor and making arrangements for the rotation. If desired, the student may also consult the graduate committee or other faculty members to help decide on rotation laboratories.

9. Graduate Advisory Committee and Program of Study

The Graduate Advisory Committee Chair <u>must be</u> a Neuroscience faculty. Each student's Graduate Advisory Committee and Program of Study are established through the **Graduate Progress Report (<u>GradProg</u>**). In cooperation with your Graduate Advisory Committee Chair, you should select committee members who will be of assistance to you during your graduate program. Once faculty members have accepted the invitation to serve on your Graduate Advisory Committee, approve the Committee through the Graduate Program Coordinator and enter the names of your Advisory Committee in <u>GradProg</u>.

MS Program

The Master Advisory Committee must consist of three graduate faculty members, with a minimum of two graduate faculty members from the Neuroscience Center. All committee members need to be approved by the Graduate Advisory Committee Chair and Graduate Program Coordinator.

PhD Program

The Doctoral Advisory Committee must consist of at least four faculty members, with a minimum of three Neuroscience faculty from the Neuroscience Center. Up to two additional

committee members can be included and could be graduate faculty members from outside the Neuroscience Center. All committee members must be approved by the Graduate Advisory Committee Chair and Graduate Program Coordinator. One of the committee members may be selected from outside the University, with approval from the Graduate Advisory Committee Chair and Graduate Program Coordinator and Office of Graduate Studies. A petition for exception for outside committee members must be submitted and include a statement of your reason(s) and the appropriate signatures. This outside member is required to send a curriculum vitae to the Office of Graduate Studies. Petitions requesting exceptions to graduate policy must be originated with the Graduate Program Supervisor, who will start the online process. The Graduate Advisory Committee Chair can also decide if an additional committee member (to increase the committee to 5 members) is needed to meet the demands of the dissertation project and to suit the needs of the student's Program of Study. The Graduate Program Coordinator, with the Graduate Committee in consultation, will review the selection of members of the advisory committee for approval. Given there are four committee members, should a split decision occur during the prospectus or final defense "A majority vote is not necessary to recess (pass with qualifications, fail) an examination. If two or more examiners vote to recess (pass with qualifications, fail), the examination is recessed (passed with qualifications, or failed)" per Graduate Studies guidelines.

Procedure to Form a Graduate Advisory Committee:

- 1. Clear the names of faculty you would like on your committee with your Graduate Advisory Committee Chair **AND** the Neuroscience Graduate Program Coordinator.
- 2. Contact each member individually and ask him/her if he or she is willing to serve on your Graduate Advisory Committee.
- 3. If you request a graduate faculty member from another university to be on your committee, you must get committee approval and request that the Graduate Program Supervisor submit a Petition for Exception stating your reason(s) and obtain the appropriate signatures for the Office of Graduate Studies approval.
- 4. Enter the names of your Advisory Committee in (GradProg).

Program of Study:

The Program of Study is a carefully considered plan which identifies the student's required courses. Consult your Graduate Advisory Committee Chair to develop and approve your Program of Study. This is accomplished using GradProg, which provides detailed instructions. The Graduate Advisory Committee, Graduate Program Coordinator, and Graduate Program Manager must approve the final Program of Study.

Deadline to File Program of Study:

All graduate students must file their Program of Study according to the deadlines given. This must be submitted in time in order to maintain status as an active graduate student. If necessary, changes can be made by filing a change form signed by the Advisory Committee and Graduate Coordinator.

Program	Deadline
MS	3 rd Week of Second Semester
PhD	3 rd Week of 3 rd Semester

10. Requirements for Degrees

A. Credit Hours

BYU stipulates the following minimum standard for credit hours required:

MS Program

- 30 credit hours total (24 hours of course work including seminar and 6 thesis hours); 20 hours must be in the 500 series or above (can include 699R, etc.)
- No more than 10 credit hours of non-degree credit and no home study (except prerequisites) can be applied toward the MS degree.
- Undergraduate credit: Graduate Studies allows up to 9 credit hours of undergraduate courses (300-400 level) if it pertains to the area of study. If more than that is needed for your course outline, a Petition for Exception is required for approval.
- Admitted MS students would need to re-apply for PhD program and be accepted to the PhD program to switch from MS to PhD. EX: Starts in Fall 2022 as MS Student apply in January 2023 for PhD program to start in Fall 2023 as PhD Student.

PhD Program

- The minimum requirement for students who do not have a Master's degree is 56 semester credit hours beyond the baccalaureate degree; the 56 hours may not include undergraduate (100 to 400 level) or more than 18 credit hours of dissertation credit.
- Students who have earned a Master's degree must complete at least 36 semester credit hours of additional graduate work at BYU beyond the credits earned as part of their Master's degree.

B. Transfer Credit

No more than 10 hours of Transfer Credit (or credit requested for classes taken but not counted in any previous degree program) are allowed.

Credit taken at other accredited universities in the United States or in Canada may be applied, with departmental approval, toward a graduate degree at BYU under the following conditions:

- Transfer credits must clearly be graduate level credits.
- The grade for any such course must be B or higher. Pass/fail credits are nontransferable.
- Home study, correspondence, and extension courses are non-transferable.
- Courses taken before a student begins graduate work at BYU must be approved during a student's first semester of study at BYU.
- Courses taken at another university after the student has begun studies at BYU must be
 pre-approved by graduate committee members and the graduate coordinator; the proposed
 credit must be submitted on the Program of Study in GradProg. Only credit taken within the
 student's time limit may count towards the degree (8 years for doctoral and 5 years for
 master's degree).
- Credit cannot have already been applied to another degree.

C. Minimum Registration for Full Time Student Status Entering Year:

Fall 8.5 credit hours minimum
Spring or Summer 2 credit hours minimum

See Graduate studies for additional information:

https://gradstudies.byu.edu/academics/minimum-registration-requirements

International students are required to be registered as full-time students. To be considered full-time for tuition and immigration purposes, international students must register for at least 9.0 credit hours in both fall and winter semesters or at least 4.5 credit hours in a term. See Information for international students: https://gradstudies.byu.edu/academics/full-time-status

Each continuing year on active status:

The minimum registration for all active graduate students is 6 credit hours during fall and winter semesters until all didactic courses are completed, after which 2 credit hours/semester is acceptable. 2 credit hours/semester still permits the graduate student to obtain an activity card for the year. Note that registration is not necessarily required during spring or summer term, but the University will terminate the graduate status of any graduate student who does not take at least 6 credit hours/ academic year. There may be additional circumstances (e.g., if the student is receiving student loans) that necessitate other registration requirements. Note: Remember that graduate studies is a full-time commitment, even if you are only registered for 2 credit hours/semester. For international students, the credit hour rules are the same as for the entering year.

Students who were enrolled for Winter semester, and who will also be enrolled for Fall Semester, are eligible to work on campus during Spring and Summer Terms without taking classes during either term. However, any student employee who is not enrolled in at least 1.0 credit hours during Spring Term and/or Summer Term must pay the FICA tax during that term.

Last year of graduate program:

Students are required to take a minimum of 2 credit hours in the semester/term in which they defend their thesis and graduate. If a student defends in one semester/term and graduates in another semester/term, they must take at least 2 credit hours in the semester/term in which they defend and another 2 credit hours in the semester/term in which they graduate.

D. Interrupted Graduate Program

For students who interrupt their graduate programs at BYU and do not maintain 6 hours/year continuous registration, the following stipulations apply:

If on LDS mission:

There is guaranteed re-entry immediately after mission release if student has been registered for at least 1 semester of graduate school at BYU before leaving on mission. No re-entry fees.

If not on LDS mission:

If for some reason a student needs to leave BYU for an indefinite time period during the course of his or her graduate program and does not anticipate needing the services of the university or their Graduate Advisory Committee during that period of time, the student may avoid paying continuous registration (i.e., 6 hours per year) by contracting in advance with the Neuroscience Center to eventually return to active status. This is done by completing Application to Resume Graduate Studies on the Grad Studies website at: https://gradstudies.byu.edu/academics/forms. This form must be completed before the student interrupts his or her program at the university, and a \$600 fee must be paid when it is submitted to the Neuroscience Center for evaluation. The fee only applies to students who are resuming their grad program after being dropped for

minimum registration issues. Students who are on leave will not be dropped for minimum registration issues because a leave is recorded in their student record. On the form, students should identify an estimated desired re-entry date which cannot exceed two years from the time the student's leave of absence begins. This interrupted time away from the university will count in the determination of 5-years maximum for an MS program and 8-years maximum for a PhD program at BYU. If the form is approved by the Neuroscience Center, it will be forwarded to the BYU Graduate School and entered onto the records at that office so that the graduate student will not be terminated for lack of continuous registration during the approved leave period.

An approved form allows for the following:

- The student may re-enter on or before the indicated date with no additional fee or cost other than the usual registration cost incurred for that new semester or term.
- The student may continue the same research project (if the project is still available) and with the support of the same Graduate Advisory Committee Chair (provided that individual is still at the university).

Notes:

- No financial support is guaranteed for graduate students returning under this option unless the Director so specifies. Additional stipulations may be imposed on the student when he or she returns; however, these stipulations will be clearly specified in writing at the time the form is evaluated by the Director.
- Irrespective of the circumstances involved, only one such form ("Application to Resume Graduate Study") will be approved for any one graduate student during his or her graduate program at BYU.
- This form must be used by all graduate students who have been accepted into the Neuroscience graduate programs and who wish to interrupt their graduate program without paying the continuous registration fee. This also includes those graduate students who interrupt their BYU graduate program to transfer to professional schools, other graduate schools, etc.

11. Department Requirements

Requirements for all Neuroscience graduate programs are listed in this section. All programs require attendance at weekly seminars and a yearly research presentation.

Prerequisite Courses:

Masters students are expected to have taken the prerequisites classes (or equivalent). The prerequisite classes are listed in the section below. Any deficiency in prerequisites should be made up during the first year and are specified in the letter from the Neuroscience Center when accepted to the program. Typically, admitted students with limited background in neuroscience are required to take Advanced Neuroscience (Neuro 480) before taking Neuro 601.

Doctoral students are expected to have taken the prerequisite classes (or equivalent). These classes are listed below. Any deficiency should be made up during the first year and are specified in the letter from the Graduate Program Coordinator when accepted in the program. Note: 400-level courses cannot count toward the required 56 semester hours.

Important Note: Up to 9 credit hours of 400-level courses <u>can</u> count toward the required 30 credit hours, pending recommendation and approval by the Graduate Advisory Committee.

Prerequisite Courses:

- Molecular/Cellular/Behavioral Neuroscience
- Physiology with lab
- Biochemistry

Suggested additional prerequisites:

- Cellular/Molecular Biology
- Organic Chemistry
- College Physics (e.g. Introduction to Newtonian Mechanics; Introduction to Waves;
 Optics and Thermodynamics, Introduction to Electricity and Magnetism)

12. REQUIRED MS GRADUATE CLASSES

CREDITS

	Biology 503	Research Orientation	1.0
	Cell 570	Responsible Research Conduct	1.0
	Stats 511 or PWS 633 (or equivalent)	Introduction to Statistics for Graduate Students or Biometry & Experimental Design	3.0 (or equivalent)
ram	Neuro 601	Cellular Neuroscience	3.0
Program	Neuro 602	Behavioral Neurobiology	3.0
MS	Neuro 694R	Research Presentation (Presentation of Research in Progress)	1.5 (minimum; 0.5 credits for 3 semesters)
	Neuro 696R	Neuroscience Graduate Seminar	1.5 (minimum; 0.5 credits for 3 semesters)
	Neuro 699R	Master's Thesis	6.0 – 7.0 (minimum)
		Elective courses	9.0 (minimum)
		Total Credits	30

13. MS Elective Courses

The selection of elective courses should be made in consultation with your Faculty Mentor/ Graduate Advisory Committee Chair and Graduate Advisory Committee as needed. When planning your Program of Study be sure that the class you want to take will be offered as some classes are only offered every other year. Three (3) credit hours of course work (500 level and above) must be taken outside the primary area of research.

Psychology

PSYCH 501 Data Analysis in Psych Rsrch 1

PSYCH 502 Data Analysis in Psych Rsrch 2

PSYCH 513R Functional MRI Design & Analysis

PSYCH 575 Cognitive & Affective Processes

PSYCH 585 Neuro/Biol Bases of Behavior

PSYCH 628 Adv Perception & Cognitive Development

PSYCH 695 R Independent Readings

PSYCH 697R Independent Research

PSYCH 712R Topics in Neuropsychology

PSYCH 715 Neuroanatomy

PSYCH 785R Advanced Topics in Behavioral Neuroscience

CELL

CELL 520R Adv Topics in Human Anatomy

CELL 550R Advanced Topics in Cell Bio & Physiology

CELL 561 Physiology of Drug Mechanisms

CELL 568 Biophysics

CELL 570 Responsible Research Conduct

CELL 650R Topics-Cell Bio/Physiol/Neuro

Microbiology & Molecular Biology

MMBIO 551R Current Topics in MMBio

MMBIO 522 Flow Cytometry

Counseling Psychology & Special Education

CPSE 613 Autism Spectrum Disorders

Communication Disorders

COMD 634 Cognitive Comm Disorders

Linguistics

LING 545 Psycholinguistics

14. REQUIRED PhD GRADUATE CLASSES

CREDITS

Biology 503	Research Orientation	1.0
Cell 570	Responsible Research Conduct	1.0
Stats 511 or PWS 633 (or equivalent)	Introduction to Statistics for Graduate Students or Biometry & Experimental Design	3.0 (or equivalent)
Neuro 601	Cellular Neuroscience	3.0
Neuro 602	Behavioral Neuroscience	3.0
Neuro 649R	Neuroscience Laboratory (Rotation)	4.0 (max of 6 hours)
Neuro 694R	Research Presentation (Presentation of Research in Progress)	3.5 (minimum; 0.5 credits for 7 semesters)
Neuro 689R	Practicum in Neuroscience Teaching or Research	3.0
Neuro 696R	Neuroscience Graduate Seminar	3.5 (minimum; 0.5 credits for 7 semesters)
Neuro 799R	Doctoral Dissertation	18.0 – 21.0 (minimum)
	Elective Courses	10.0 (minimum)
	Total Credits	56
	Cell 570 Stats 511 or PWS 633 (or equivalent) Neuro 601 Neuro 602 *Neuro 649R Neuro 694R Neuro 689R Neuro 696R	Cell 570 Responsible Research Conduct Stats 511 or PWS 633 (or equivalent) Elective Courses Responsible Research Conduct Introduction to Statistics for Graduate Students or Biometry & Experimental Design Cellular Neuroscience Responsible Research Graduate Students or Biometry & Experimental Design Cellular Neuroscience Neuro 602 Behavioral Neuroscience *Neuro 649R Neuroscience Laboratory (Rotation) Neuro 694R Research Presentation (Presentation of Research in Progress) Neuro 689R Practicum in Neuroscience Teaching or Research Neuro 696R Neuroscience Graduate Seminar Neuro 799R Doctoral Dissertation Elective Courses

^{*} A minimum of 2 credit hours must be performed in a laboratory different than the laboratory of the Faculty Mentor. Typically, one rotation is taken during the first semester and the second rotation is taken during the second semester of the first year.

15. PhD Elective Courses

The selection of elective courses should be made in consultation with your Faculty Mentor/ Graduate Advisory Committee Chair and Graduate Advisory Committee. **Three (3)** credit hours of course work (600 level and above) must be taken outside the primary area of research.

Psychology

PSYCH 501 Data Analysis in Psych Rsrch 1

PSYCH 502 Data Analysis in Psych Rsrch 2

PSYCH 504 Research Design

PSYCH 513R Functional MRI Design & Analysis

PSYCH 514 Computational Neuroimaging

PSYCH 517 Neuroimaging Analysis 3: fMRI

PSYCH 575 Cognitive Processes

PSYCH 585 Neuro/Biol Bases of Behavior

PSYCH 628 Adv Perception & Cognitive Development

PSYCH 695 R Independent Readings

PSYCH 697R Independent Research

PSYCH 712R Topics in Neuropsychology

PSYCH 715 Neuroanatomy

PSYCH 785R Advanced Topics in Behavioral Neuroscience

CELL

CELL 520R Adv Topics in Human Anatomy

CELL 550R Advanced Topics in Cell Bio & Physiology

CELL 561 Physiology of Drug Mechanisms

CELL 568 Biophysics

CELL 570 Responsible Research Conduct

CELL 650R Topics-Cell Bio/Physiol/Neuro

CELL 664 Cardio & Respir Physiology

Microbiology & Molecular Biology

MMBIO 514 Advanced Immunology

MMBIO 551R Current Topics in MMBio

MMBIO 522 Flow Cytometry

MMBIO 663 Articulating Science

Mechanical Engineering

ME EN 505 Applied Engineering Math

ME EN 795R Selected Topics in Mech Engr

Chemical Engineering

CHEN 518 Biomedical Engin Principles

Counseling Psychology & Special Education

CPSE 613 Autism Spectrum Disorders

Communication Disorders

COMD 634 Cognitive Comm Disorders

16. SUGGESTED COURSE WORK MAP FOR NEUROSCIENCE GRADUATE STUDENTS

10.	MS Program PhD Program	
-	MS Program Fall Semester (9-11 CH):	Fall Semester (11 CH):
	Biology 503 Research Orientation (1) Neuro 601 Cellular Neuroscience (3) Neuro 694R Research Presentation (0.5) Neuro 696R Neuro Grad Seminar (0.5) Stats 511 or PWS 633 Intro to Stats for Grad Students (3) or Prerequisite Elective (2-4) or Prerequisite	Biology 503 Research Orientation (1) Neuro 601 Cellular Neuroscience (3) Neuro 649R Neuro Lab (Rotation 1) (2) Neuro 694R Research Presentation (0.5) Neuro 696R Neuro Grad Seminar (0.5) Prerequisite (2-4) Stats 511 or PWS 633 Intro to Stats for Grad Students (3) or Prerequisite
	Funding: TA (if available)	Funding: RA
	Winter Semester (8-11 CH):	Winter Semester (8-11 CH):
First Year	Cell 570 Responsible Research Conduct (3) Neuro 602 Behavioral Neuroscience (3) Neuro 694R Research Presentation (0.5) Neuro 696R Neuro Grad Seminar (0.5) Elective (2-4)	Cell 570 Responsible Research Conduct (3) Neuro 602 Behavioral Neuroscience (3) Neuro 649R Neuro Lab (Rotation 2) (2) Neuro 694R Research Presentation (0.5) Neuro 696R Neuro Grad Seminar (0.5) Elective (2-4)
	Form Graduate Advisory Committee	
	Program of Study	
	Prospectus	
	Funding: TA (if available)	Funding: TA
	Spring/Summer (2-3 CH)	Spring/Summer (2-3 CH):
	Elective (3)	Elective (3) or
	Comprehensive Even	Neuro 649R Neuro Lab (2)
	Comprehensive Exam Funding: TA (if available)	Funding: RA
	Fall Semester (6-7 CH):	Fall Semester (8 CH):
	Neuro 694R Research Presentation (0.5)	Neuro 649R Neuro Lab (2-3)
	Neuro 696R Neuro Grad Seminar (0.5)	Neuro 694R Research Presentation (0.5)
	Elective (3-4)	Neuro 696R Neuro Grad Seminar (0.5)
	2.001176 (0-1)	Elective (2-4)
	Funding: TA (if available)	,
	· · ·	Form Graduate Advisory Committee
a		Program of Study
Year		Prospectus
		Funding: TA
Second	Winter Semester (7 CH):	Winter Semester (8 CH):
Sec	Neuro 699R Master's Thesis (6)	Neuro 649R Neuro Lab (2-3)
		Neuro 694R Research Presentation (0.5)
	Defend Thesis	Neuro 696R Neuro Grad Seminar (0.5)
	Graduate	Elective (2-4)
		Comprehensive Even
	Funding: RA	Comprehensive Exam Funding: TA
	i unung. IVA	Spring/Summer (2-3 CH)
1		Opinig/Guillilei (2-3 Ci i)

Subsequent Fall Semesters Neuro 649R Neuro Lab (2-3) Neuro 694R Research Presentation (0.5) Neuro 696R Neuro Grad Seminar (0.5)	
Elective (2-4) Neuro 799 R Doctoral Dissertation (2)	
Funding: TA	
Subsequent Winter Semesters	
Neuro 649R Neuro Lab (2-3)	
Neuro 694R Research Presentation (0.5)	
Neuro 696R Neuro Grad Seminar (0.5)	
Elective (2-4)	
Neuro 799 R Doctoral Dissertation (2)	
Funding: TA	
Subsequent Springs/Summers	
Neuro 799 R Doctoral Dissertation (2)	
Funding: RA	

^{*}TA=Teaching Assistantship; RA=Research Assistantship. CH= Credit Hours

II. EXPECTATIONS & REQUIREMENTS

17. Satisfactory Progress

A graduate program is a full-time commitment. It is expected that each student will demonstrate satisfactory progress toward the degree. This includes meeting university minimums for GPA (3.0) and making timely progress in the program steps outlined below. It is also expected that the graduate student will meet with their Advisory Committee at least twice per year (Fall and Winter Semesters) to assess progress in the Program of Study and thesis/dissertation research. Students should also display a cooperative attitude and adhere to the university's standards of conduct. It is expected that all students will maintain academic honesty as defined in the University Honor code.

18. Graduate Advisory Meeting

Periodic meetings with your advisory Committee should be held at least twice each year. In these meetings research progress and/or difficulties should be presented and discussed. Between meetings, any member of the Advisory Committee can be consulted for help regarding the research project; however, most detailed problems should usually be worked out with your Advisor.

19. Progress Review (or Performance Evaluations)

To meet federal and university requirements, departments evaluate academic performance of graduate students twice annually. Three categories can be reported: Satisfactory, Marginal, and Unsatisfactory. Students who have been given a Marginal or Unsatisfactory evaluation will be notified in writing explaining the evaluation and expectations for satisfactory progress. Graduate students with a current Unsatisfactory evaluation are not eligible to receive federal aid. The university will automatically terminate any student that receives two sequential evaluations that are less than Satisfactory. Evaluation forms will be emailed out about 1 month before it is due.

Students complete Part I and the Graduate Advisory Committee reviews the student's progress and submits their recommendation in Part II as Satisfactory, Marginal, or Unsatisfactory Progress. The Chair of the Graduate Advisory Committee submits the review to the Graduate Program Coordinator. After all the signatures have been acquired, the form must be turned in or emailed to the Graduate Program Supervisor. **These reviews will be due by January 31**st and May 15th. Failure to turn in Progress Reviews by this date will result in an Unsatisfactory rating. Students will be sent a letter informing them of this rating and what they can do to improve.

20. Grievance Procedures

Students that feel they have been unfairly treated or evaluated, may appeal to the Departmental Graduate Committee, then to the Department Chair, and finally to the Dean of Graduate Studies.

21. Seminar Requirement

MS and PhD students will be required to present one seminar each year to members of the Neuroscience Center by attending Neuro 694R. All graduate students are also expected to attend seminars by attending Neuro 696R. We recommend that MS and PhD students begin taking Neuro 694R and Neuro 696R the first year of the program. Master's students must

complete 1.5 credits of the Neuro 696R and 694R. PhD students will need to complete 3.5 credits of each course, which can be spread during their tenure in the program.

22. Research

In most instances, students are expected to originate and develop their own research project that will be acceptable to the Graduate Advisory Committee. This is done by coordinating with your Advisor. If a student's interests are not commensurate with the capabilities or interests of the Faculty Mentor/ Graduate Advisory Committee Chair, the student should select a different Faculty Mentor/ Graduate Advisory Committee Chair or change the research project as necessary. Students should periodically discuss research with the Graduate Advisory Committee; however, most detailed problems should be worked out in advance with the Faculty Mentor/Graduate Advisory Committee Chair. Please do not ask for technical help from faculty members who are not on the Graduate Advisory Committee, unless permission is granted from the Faculty Mentor/Graduate Advisory Committee Chair.

III. PROSPECTUS OF RESEARCH

The prospectus needs to be approved before the end of the second semester for MS students and by the end of the first semester of the second year for PhD students. The prospectus should be submitted to the Graduate Advisory Committee two weeks prior to the oral defense. Students who have not completed the prospectus on time, lose priority for funding (TA/RA selection) and may be dismissed if more than a semester late. If the research emphasis changes more than in a minor way after a prospectus is approved, the student must submit a new approved prospectus to the Center as soon as possible, and no later than one semester before graduation.

23. PhD Student Prospectus

The prospectus of PhD students should be written in the form of a grant proposal of the respective field (e.g. NRSA)

24. Scheduling the Prospectus Defense

Student will contact the committee members and determine a date and time to meet together. Scheduling a room for a prospectus defense occurs through the Neuroscience Graduate Program Supervisor at least two weeks in advance of the defense.

25. Approval of the Prospectus

Once the defense has taken place and all required changes have been made, the prospectus is uploaded to <u>GradProg</u>. The prospectus can then be downloaded by the Graduate Advisory Committee members. The prospectus must be converted to a PDF before upload. The Graduate Advisory Committee will be notified by email that they can view and approve the Prospectus through <u>GradProg</u>. When approved by all committee members, the student and faculty will see a green check mark in the Prospectus box in <u>GradProg</u>

IV. DEFENSE & COMPREHENSIVE EXAMINATIONS

26. MS Program

E. Thesis Defense

The final responsibility for compliance with all Neuroscience Center, college, and university regulations for thesis/dissertation preparation rests solely with the graduate student. Each student must defend his/her thesis before the Graduate Advisory Committee in a public seminar (can count as required yearly seminar). Allow yourself two weeks in advance to set a defense date. After the date is confirmed with the committee, schedule the defense through the Graduate Program Supervisor or in GradProg. This is a University requirement. No Exceptions! Prior to that examination, however, it is expected that the Graduate Advisory Committee will be actively involved in reviewing the thesis, and that the members of the Graduate Advisory Committee and the student will have resolved matters of thesis content, format, sentence structure, table and figure organization, etc. Although the Presentation of Thesis is open to the public, only members of the Graduate Advisory Committee may vote on the student's performance.

When you have successfully passed this examination, ask your Graduate Advisory Committee Chair to update the decision in **GradProg** and ask committee members to approve it. If you pass with qualifications, you will need to make the necessary changes before your committee can approve it in **GradProg**. Contact the Graduate Program Supervisor if you have any questions.

The instructions for formatting, preparing copies of your thesis, and submitting the forms, fees and copies for binding are included in **GradProg** in the Checklist For Preparing Your Title Page And Preliminary Pages and in Resources.

F. Electronic Thesis and Dissertation (ETD)

Once the student has successfully defended their thesis or dissertation, they need to upload the ETD to **GradProg**. In the Document subsection, you will upload a PDF document. It must have all fonts embedded as well as bookmarks for each heading in the table of contents. This document must be approved by Graduate Studies (preliminary pages), followed by the department, college and then final approval by Graduate Studies for publishing to the digital library. You can receive comments at any stage requiring you to make edits to your ETD. You will be notified by email of any necessary changes, so pay attention to your email account. **Once you receive the final approval from Graduate Studies, the ETD requirement is met.**

Format Requirements:

- Copies need to be clean and clear with dark print and printed on 24-pound weight, acidfree bond paper. Required university pages are single-sided; the remainder of the work is to be double-sided.
- Margins: 1 inch on all sides.
- American Psychological Association Style needs to be followed, which is according to the writing style in the latest edition of the American Psychological Society Style Manual. This format needs to be consistent and clear throughout (for exceptions see below in "Fulfilling Requirements").
- Pages must be correctly paginated. Preliminary pages should be counted and, if appropriate, numbered in lower-case Roman numerals. The body should be numbered with Arabic numerals beginning with 1. All pages are to be numbered consecutively in

the body and in the appendix (1a, 10c, B1, etc., are not allowed). See GradProg Resources for further details.

- The standard university format should be followed for title page, acceptance pages and abstract.
- Please work closely with the Graduate Program Supervisor.

27. PhD Program

G. Comprehensive Examination

This written and oral examination will be administered by the student's advisory committee. It is to be given after completion of Neuro 602 and no later than the end of the second year. It will assess the student's understanding of basic scientific principles with emphasis in cognitive neuroscience, molecular neuroscience, and physiology, as well as on any material indicated on the official course outline. Each examiner is to evaluate the student on his/her total performance and not merely on those questions which he/she asks. The written examination will be followed by an oral examination that will delve deeper into the student's area of research emphasis.

When you have successfully passed this examination, ask your Graduate Advisory Committee Chair to update the decision in **GradProg** and ask committee members to approve it. If you pass with qualifications, you will need to make the necessary changes before your committee can approve it in **GradProg**. Contact the Graduate Program Supervisor if you have any questions.

H. Dissertation Defense

The final responsibility for compliance with all Neuroscience Center, college, and university regulations for thesis/dissertation preparation rests solely with the graduate student. Each student must defend his/her dissertation before the Graduate Advisory Committee in a public seminar (can count as required yearly seminar). Allow yourself two weeks in advance to set a defense date. After the date is confirmed with the committee, schedule the defense with the Graduate Program Supervisor or in GradProg. This is a University requirement. No Exceptions! Prior to that examination, however, it is expected that the Graduate Advisory Committee will be actively involved in reviewing the thesis, and that the members of the Graduate Advisory Committee and the student will have resolved matters of thesis content, format, sentence structure, table and figure organization, etc. Although the Presentation of Thesis is open to the public, only members of the Graduate Advisory Committee may vote on the student's performance.

When you have successfully passed this examination, ask your Graduate Advisory Committee Chair to update the decision in **GradProg** and ask committee members to approve it. If you pass with qualifications, you will need to make the necessary changes before your committee can approve it in **GradProg**. Contact the Graduate Program Supervisor if you have any questions.

The instructions for formatting, preparing copies of your thesis, and submitting the forms, fees and copies for binding are included in **GradProg** in the Checklist For Preparing Your Title Page And Preliminary Pages and in Resources.

I. Professional Development Requirement

Depending on the student's career goals, a professional development requirement (Neuro 689R) must be completed during the 3rd year of the program. This will include either

teaching 10 hours of lecture in a Neuroscience course (with faculty mentor guidance) or submitting a graduate research fellowship application to an appropriate funding source (BYU Graduate Office, NSF, NIH, etc.).

J. Electronic Thesis and Dissertation (ETD)

Once the student has successfully defended their thesis or dissertation, they need to upload the ETD to **GradProg**. In the Document subsection, you will upload a PDF document. It must have all fonts embedded as well as bookmarks for each heading in the table of contents. This document must be approved by Graduate Studies (preliminary pages), followed by the department, college and then final approval by Graduate Studies for publishing to the digital library. You can receive comments at any stage requiring you to make edits to your ETD. You will be notified by email of any necessary changes, so pay attention to your email account. **Once you receive the final approval from Graduate Studies, the ETD requirement is met.**

Format Requirements:

- Copies need to be clean and clear with dark print and printed on 24-pound weight, acidfree bond paper. Required university pages are single-sided; the remainder of the work is to be double-sided.
- Margins: 1 inch on all sides.
- American Psychological Association Style needs to be followed, which is according to the writing style in the latest edition of the American Psychological Society Style Manual. This format needs to be consistent and clear throughout (for exceptions see below in "Fulfilling Requirements").
- Pages must be correctly paginated. Preliminary pages should be counted and, if appropriate, numbered in lower-case Roman numerals. The body should be numbered with Arabic numerals beginning with 1. All pages are to be numbered consecutively in the body and in the appendix (1a, 10c, B1, etc., are not allowed). See <u>GradProg</u> Resources for further details.
- The standard university format should be followed for title page, acceptance pages and abstract.
- Please work closely with the Graduate Program Supervisor.

V. FULFILLING REQUIREMENTS

Graduate students in Neuroscience may fulfill the dissertation requirement by completing one of the following options:

- A regular dissertation written in strict compliance with "Format Requirements" items above, and according to the writing style in the latest edition of the American Psychological Association (APA) Manual using the latest edition (currently 7th Edition). If published, manuscripts are included in the dissertation and will be in the journal format not APA format.
- Published article(s) in lieu of a regular thesis or dissertation. A minimum of one
 published article in lieu of a thesis, and a minimum of three published articles in lieu of a
 dissertation. Published papers should be submitted as separate chapters with the
 required preliminary university pages in front. An introductory chapter and concluding
 chapter are also required but may be brief.

In cases of co-authorship, the student's name must appear as primary author on at least one major paper in either degree level, and the work submitted must be recognized as a "full-length journal article" rather than a communication, preliminary note, abstract, or letter to the editor. The journal selected must be one in which the major works of the respective field are regularly published and must be referenced. The work undertaken and the length of time required to complete the study should not be less than that ordinarily expected for a thesis or dissertation.

- An appropriate number of manuscripts either accepted for publication, submitted for publication, or prepared for submission to such a journal as described above. All manuscripts must be written in the EXACT format of the journal to which they have been or will be submitted.
- Any combination of requirements listed under b and c above which is acceptable to all members of the Graduate Advisory Committee and the Director.

28. Dissertation Review and Approval Process

- Thesis and dissertation approval is the responsibility of the student and Graduate Advisory Committee, and they should ensure the thesis' or dissertation's content quality is appropriate for Neuroscience and the research question(s). They also confirm that the writing is clear, concise, and grammatically correct. They verify that the final document conforms to department and university guidelines. University guidelines can be found on the graduate studies website.
- Submit an electronic copy of your thesis/dissertation (including all ancillary pages required by the BYU Office of Graduate Studies).
- Submit one copy of the thesis/dissertation, in final form on GradProg at least two weeks before the examination. This will enable interested parties to review it prior to the oral exam. The BYU Office of Graduate Studies will not clear scheduling of oral exams unless this requirement is met.
- Your thesis/dissertation defense needs to be scheduled through <u>GradProg</u>.
- You will need to inform the Graduate Program Supervisor of the date, time, and location so that they may advertise to those that may be interested in attending your examination.

29. Scheduling a Room for Defense

Email the graduate program manager the date and time you would like to schedule your thesis/dissertation. It would also be helpful to know how many people you expect in attendance to make sure we request a big enough room. The graduate program manager will respond to you with the date, time, and location.

The graduate program manager will also set up a zoom link upon request.

30. Thesis/Dissertation Examination

- 1. The first part of the examination will be a presentation of your research and will be open to all interested individuals.
- 2. The second part will be an examination of your research by your Graduate Advisory Committee members.
- 3. The final voting will be done ONLY by members of the Graduate Advisory Committee who will submit their decision on **GradProg**.

4. After you pass the Presentation of Thesis/Dissertation examination, submit a finished copy of your thesis/dissertation and all ancillary pages required by the BYU Graduate School and by the Neuroscience Center to GradProg.

31. Preparing Thesis/Dissertation Copies for Center Access

After your Oral Thesis Exam and when you have your final version of your thesis or dissertation approved by your committee, you will create an electronic thesis or dissertation (ETD) which is a PDF of your document submitted to **GradProg**. Your department and college will review the document adding their feedback for necessary changes. Once both your department and college have approved the document it will be sent to Graduate Studies.

- The Neuroscience Center will pay for and print one (1) copy for its long-term access.
- The Graduate Studies Office has access to the final approved ETD and the Library will pay for and print their own copy.
- It is advisable that the student keep an electronic copy of their final approved ETD. It is possible that a member of their committee or mentor could request a copy of the final approved ETD. These copies will be at the student's expense.

32. Program Deadlines

K. MS Students

EVENT	TIME	FORM
Graduate Advisory Committee Selection and Program of Study	3rd week of 2nd semester (student subject to dismissal if not submitted during 3rd semester)	GradProg
Present Prospectus to Graduate Advisory Committee	End of 2nd semester (student subject to dismissal if not submitted during 3rd semester)	GradProg
Present Seminar to Department	Once per year	
Progress Reviews	January 31 st and May 15 th	Grad Program Supervisor
Apply for Graduation	Before department/college/university deadline	GradProg
Schedule Defense of Thesis and submit Thesis to Department	At least 2 weeks before Thesis Defense	GradProg
Thesis Defense	Neuroscience Center Deadline	Grad Program Supervisor
Submit Final Thesis (ETD)	Neuroscience Center Deadline	etd.byu.edu
Exit Interview	At least 1 Week before Graduation	Grad Program Supervisor

Note: Plan to finish each step before the absolute deadline. Do not plan to hold any committee meeting or any examination at any time when school is not in session. You may hold examinations during Spring and Summer terms; however, the department will not be responsible for arranging graduate examinations during the Spring and Summer terms, or at any time when regular school is NOT in session. It is the responsibility of the student to make sure the committee members will be available.

L. PhD Students

EVENT	TIME	FORM
Graduate Advisory Committee Selection and Program of Study	3rd week of 3rd semester (student subject to dismissal if not submitted during 2 nd year)	GradProg
Present Prospectus to Graduate Advisory Committee	End of 1st semester of 2nd year (student subject to dismissal if not submitted during 2nd year)	GradProg
Take Comprehensive Examination	No later than end of 2nd year (student subject to dismissal if not completed during 3rd year)	
Present Seminar to Department	Each year	
Progress Reviews	January 31st and May 15th	Grad Program Supervisor
Apply for Graduation	Before department/college/university deadline	GradProg
Schedule Defense of Dissertation and submit to Department	At least 2 weeks before final Defense of Dissertation	GradProg
Dissertation Defense	Neuroscience Center deadline	GradProg
Submit Final Dissertation (ETD)	Neuroscience Center Deadline	etd.byu.edu
Submit Doctoral Survey	Before department/college/university deadline	
Exit Interview	At least 1 Week before Graduation	Grad Program Supervisor

Note: Plan to finish each step before the absolute deadline. Do not plan to hold any committee meeting or any examination at any time when school is not in session. You may hold examinations during Spring and Summer terms; however, the department will not be responsible for arranging graduate examinations during the Spring and Summer terms, or at any time when regular school is NOT in session. It is the responsibility of the student to make sure the committee members will be available.

VI. GRADUATION, DEFENSE, & FINAL SUBMISSION STEPS

- 1. Graduation: Apply online at https://gradprogress.sim.byu.edu/studentProgress/committee (Tools section on the left side of the page). Graduate Program Supervisor will approve online. University deadlines apply. If you need more information about applying for graduation online, we recommend contacting the advisement specialist at gsadvisementintern@byu.edu, who should be able to give you more information.
- 2. Schedule Defense of Thesis/Dissertation.
- 3. Formatting instructions are found in the Formatting tab in "Resources" (https://gradprogress.sim.byu.edu/resources)
- 4. At least 2 weeks prior to defending, submit a copy of your thesis/dissertation to GradProg.
- 5. Defend your thesis/dissertation.
- 6. Make content changes if required and clear qualifications with your Committee Chair.
- 7. Convert to pdf and embed font then submit final copy through GradProg for final approval.
- 8. Approval of your ETD can take as long as 2 weeks. You must remain available to make corrections as the ETD process moves forward.
- PhD students submit Survey of Earned Doctorate found in the Resources section of GradProg.
- 10. The Neuroscience Center will pay for a department copy. Additional copies at your expense can be ordered at https://gradworksonline.com/gradworks/#/.
- 11. Schedule an Exit Interview with Dr. Jeffrey Edwards and report schedule to the Graduate Program Supervisor. Complete the Exit Interview.
- 12. The Graduate Program Supervisor will clear ADV 08 requirements and T grades.

VII. FINANCIAL ASSISTANCE

The department strives to provide substantial financial support to all graduate students. This is typically in the form of teaching assistantships (TA) and research assistantships (RA). This section outlines what financial support is provided to graduate students by the department and how to apply for additional funds. To qualify for financial support (e.g., Assistantship, Travel, and Tuition Award) candidates must be in good standing with a minimum 3.0 GPA and be registered for at least 6 hours per semester or 1 hour per term (if last semester of study: 2 hours per semester and 1 hour per term).

33. MS Students

The department does not guarantee funding for MS students. However, when possible, MS students are funded through teaching assistantships (TAs) from the Neuroscience Center or research assistantships (RA) from the lab in which they are working. If funding is available, MS students may also receive partial or full scholarships (tuition), for up to four semesters. Financial support during Spring and Summer Terms depends on the available funds and teaching assignments available. The department awards these TAs to MS students based on their qualifications, performance in the program, and the availability of positions. RAs are also available through various university programs and provide the same level of support as a TA while allowing the student to work full time in the research lab. Tuition scholarships may be available from the department during Spring and/or Summer Terms but are not guaranteed. Center support beyond four semesters may be applied for and will be considered when funds exist.

34. PhD Students

PhD students receive financial support through Teaching Assistant (TA) or Research Assistant (RA) positions for Fall, Winter, and Spring/Summer semesters based on their acceptance letter. Similarly, tuition scholarship support is provided for PhD students for Fall, Winter, Spring, and Summer. Center support for PhD students is provided for four years. Beyond that point, students may apply for additional support, but such support is not guaranteed.

35. Direct Deposit

The wages for your assistantship will be paid by direct deposit. The university requires all employees to receive pay by direct deposit.

To set up wage direct deposit:

- Log on to myBYU from the BYU homepage
- Under the Campus Links section, expand the Work section
- Select Human Resources/Payroll
- From Main Menu select Self Service
- Select Payroll and Compensation
- Select Direct Deposit
- Enter your bank and account information

To set up scholarship direct deposit:

- Log on to myBYU from the BYU homepage
- Under the Campus Links section, expand the School section
- Select My Financial Center
- Click on Direct Deposit (Edit) under Profile
- Enter your bank and account information

36. Contracts

MS Students

MS students are only offered funding contracts if there are available courses for them to TA or they are an International Student. Contracts are done on a semester basis. Contracts are issued about 2 weeks before the start of the semester or term. Please sign your contract as soon as you are emailed about it. If there is a delay in signing your contract it is likely that you will miss a pay period. The Graduate Program Manager submits these contracts. Should you have an issue with the contract please reach out to the Graduate Program Manager.

PhD Students

Contracts are submitted on a semester basis. Contracts are 18 weeks for Fall and Winter semesters and 16 weeks for Spring/Summer combined. This allows you to be paid continuously throughout the year and not have any pay gaps. Please sign your contract as soon as you are emailed about it. If there is a delay in signing your contract it is likely that you will miss a pay period. The Graduate Program Manager submits these contracts. Should you have an issue with the contract please reach out to the Graduate Program Manager.

37. Tuition

MS Students

If you have been offered a tuition waiver, the Graduate Program Manager will pay your tuition through the scholarship office the week before classes start. If there is a hold on your account during the first week of classes due to tuition, please contact the Graduate Program Manager.

PhD Students

The Graduate Program Manager will pay your tuition through the scholarship office the week before classes start. If there is a hold on your account during the first week of classes due to tuition, please contact the Graduate Program Manager.

38. Graduate Student Travel Funds

We will pay for up to \$500 of travel expenses per calendar year. This money will be distributed to your faculty PI to cover your travel expenses. Given budgetary constraints, all qualifying requests for travel funds may not be granted in a fiscal year. Priority for requests will be given to those students who demonstrate cost sharing by their advisors.

39. Additional Student Funding Opportunities

Graduate Students may also apply for the following Department/College/University funding opportunities, depending on their needs and qualifications.

ADDITIONAL FINANCIAL ASSISTANCE AVAILABLE	DEADLINES
UNIVERSITY AWARDS	
RESEARCH PRESENTATION AWARD: A travel award given by BYUGSS. Awards are around \$400 and are for presenting graduate research at a national/international conference. Applications accepted every fall and winter semester. Details at https://gradstudies.byu.edu/page/professional-presentation-award	Typically, February 1 and October 1
NEUROSCIENCE AWARDS	
RAWLINSON SCHOLARSHIP: A scholarship award given to students that show financial need, excellence in TA, or excellence in RA. Students may apply for all 3 areas but will only be awarded 1 scholarship. Applications are accepted every summer. Details at https://neuroscience.byu.edu/rawlinson-scholarship.	Typically, July 28

VIII. RESOURCES

40. Communication

All communication will be done through your BYU email address. Your email address is your netid@byu.edu. Please make sure to check this email so that you do not miss anything important. We do send our a weekly graduate student email that you may opt-in to receive at your personal email address.

41. University Forms (available online)

The university forms for graduate studies are available online at: https://gradstudies.byu.edu/academics/forms and https://gradprogress.sim.byu.edu/resources.

42. Graduate Student Society

As a graduate student, you are automatically a member of the Graduate Student Society (GSS), a university-wide organization. Presiding officers are elected by the GSS Committee and work directly with the Dean of Graduate Studies and the Dean of Student Life, representing graduate students before the university administration. Its purposes are to:

Enhance participation in the larger BYU intellectual community

Inform you of research grants, seminars, and journals

Help you feel a part of the BYU community

Advocate your needs with administration

Offer workshops on professional and academic topics

Connect departmental graduate student associations.

43. College of Life Sciences Grad Student Society

The College of Life Sciences has recently created our own Grad Student Society for our College. One of our Neuroscience graduate students is the representative for our program. This society will have socials and events throughout the semester.

44. Campus Privileges

If you are registered for at least two credits per semester, you will be eligible for all oncampus student privileges. These privileges include, but are not limited to library privileges, student housing, student insurance and student health center access, intramural sports and gym access, graduate parking permits, discount admission to sporting and cultural events, and use of physical education facilities. A valid BYU ID must be presented to have access to any of these privileges.

45. BYU ID

The university will provide a BYU photo ID card for you. This card allows you to access campus privileges. Cards are produced at the ID Center: 1057 WSC, (801) 422-3866. You do not need an appointment.

46. Office of Information Technology

The Office of Information Technology offers products, services and support to meet your technology needs.

MyBYU provides access to many applications including AIM (registration information),
 Testing Services, online courses, tuition billing, and the BYU directories.

- Open Access Labs (open computer labs located across campus) provide you with basic applications such as MS Office, internet browsers and printing.
- WIFI access is available anywhere on campus.
- Video projectors and other media equipment are available to enhance your classroom presentations (make requests through your instructors).
- For more information about OIT products, please visit their website at it.byu.edu or call (801) 422-4000.

47. International Services

The International Student and Scholar Services office, 1352 WSC, (801) 422-2695, provides visa support, advisement, and services to all international students.

48. Multicultural Student Services

The Multicultural Student Services office has a team of multicultural specialists who value the total development of the multicultural student within the Aims of a BYU Education. They have advisers who can meet with students in person, via video, or over the phone. They also host events throughout the year. 1320 WSC, (801) 422-3065, BYUMulticultural@byu.edu

49. Student Health Resources

- Student Health Center: 1750 N Wymount Terrace Dr, (801) 422-2771
- Counseling and Psychological Services (CAPS) office offers services aimed to assist students during their academic career in fulfilling their educational goals and overcoming emotional and mental health challenges. 1500 WSC, (801) 422-3035.
- University Accessibility Center: 2170 WSC, (801) 422-, uac.byu.edu.
- Title IX: 1085 WSC, (801) 422-8692, titleix.byu.edu
- University Police: 801-422-2222
- Utah County Crisis Line: 801-691-5433
- Help.byu.edu

IX. Honor Code & Academic Honesty Policy

50. Church Educational System Honor Code

Brigham Young University and other Church Educational System institutions exist to provide an education in an atmosphere consistent with the ideals and principles of The Church of Jesus Christ of Latter-day Saints. That atmosphere is created and preserved by a community of faculty, administration, staff, and students who voluntarily commit to conduct their lives in accordance with the principles of the gospel of Jesus Christ and who strive to maintain the highest standards in their personal conduct regarding honor, integrity, morality, and consideration of others. By accepting appointment, continuing in employment, being admitted, or continuing class enrollment, each member of the BYU community personally commits to observe these Honor Code standards approved by the Board of Trustees "at all times and in all things, and in all places" (Mosiah 18:9):

- Be honest.
- Live a chaste and virtuous life, including abstaining from any sexual relations outside a marriage between a man and a woman.
- Respect others, including the avoidance of profane and vulgar language.
- Obey the law and follow campus policies.
- Abstain from alcoholic beverages, tobacco, tea, coffee, vaping, and substance abuse.
- Participate regularly in Church services (required only of Church members).

- Observe Brigham Young University's Dress and Grooming Standards.
- Encourage others in their commitment to comply with the Honor Code.

51. Academic Honesty Policy

The first injunction of the Honor Code is the call to "be honest." Students come to the university not only to improve their minds, gain knowledge, and develop skills that will assist them in their life's work, but also to build character. "President David O. McKay taught that character is the highest aim of education." It is the purpose of the BYU Academic Honesty Policy to assist in fulfilling that aim.

BYU students should seek to be totally honest in their dealings with others. They should complete their own work and be evaluated based upon that work. They should avoid academic dishonesty and misconduct in all its forms, including but not limited to plagiarism, fabrication or falsification, cheating, and other academic misconduct.