

# USG Academic Degree Program Application

Released Updated Version: Summer 2023

# **Points of Contacts**

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# **Version Control**

Date	Changes	USG Approved	Website update date
		date	
7/15/2023	Overview: Added Degree Acronym	7/31/2023	8/28/2023
7/15/2023	Overview: Changed 6-Digit CIP Code to 8_Digit CIP Code	7/31/2023	8/28/2023
7/15/2023	Chart #28 deleted to reduce redundancy.	7/31/2023	8/28/2023
7/15/2023	Minor grammatical edits for clarity	7/31/2023	8/28/2023
7/15/2023	Prompt #30 – Delivery Mode chart changed to match DMA	7/31/2023	8/28/2023
12/1/2022	Updated column title in Table 25 from "Experienced Salary" to "Future Potential Earnings"	12/1/2022	12/1/2022
12/1/2022	Corrected numbering	12/1/2022	12/1/2022
12/1/2022	Corrected footnote dates	12/1/2022	12/1/2022
8/19/2022	Attach as a WORD document only – no PDFs. Use Times New Roman 12pt. font.	8/19/2022	8/19/2022
8/19/2022	All questions are required for ALL degree levels.	8/19/2022	8/19/2022
8/19/2022	Some charts have been modified/deleted for consistency and to reduce redundancy.	8/19/2022	8/19/2022
8/19/2022	Signature page must be fully completed. Any addendums must be signed off by CBO.	8/19/2022	8/19/2022
8/19/2022	External Reviews for Doctoral Degrees are the responsibility of the Institution. See Prompt 30 for more information.	8/19/2022	8/19/2022

# **USG Routing Only**

- □ Program was part of the Annual Academic Forecast
- □ This proposal requires USG integrated review

#### **USG ACADEMIC PROGRAM APPLICATION**

#### A. OVERVIEW

To be completed as part of SharePoint Submission

- 1. Request ID: (SharePoint Generated unique ID)
- 2. Institution Name: University of Georgia
- 3. USG Sector: Research University
- 4. School/Division/College: Franklin College of Arts & Sciences
- 5. Academic Department: Cellular Biology & Psychology

This program is jointly offered as an initiative and investment of Franklin College. Both departments have expertise in the multidisciplinary area of neuroscience, and both the Biology major (served by Cellular Biology faculty) and the Psychology major currently offer areas of emphasis in neuroscience. In July 2024, Franklin authorized searches for two new neuroscience faculty: an Associate Professor/Professor in Molecular Neuroscience in the Cellular Biology department and an Assistant Professor in Aging and Mental Health/Neuroscience in Psychology. Both positions are part of the Presidential Hiring Initiative managed by the Provost's office. Franklin requested these searches to solidify our commitment to neuroscience as a strategic research and academic area, and the work must be multidisciplinary to fully capture the range of the discipline. These two additive faculty positions will provide capacity for the department to develop and teach the new courses proposed here.

- 6. *Degree Level:* Bachelor
- 7. Proposed Program Name: Bachelor of Science with a major in Neuroscience
- 8. *Major:* Neuroscience
- 9. Degree Acronym: B.S.

#### 10. *CIP Code* (8 *digit*): 26.150100

(Please use default (00) for the last 2-digit extension unless using same CIP code for similar institutional program.)

#### 10. Anticipated Implementation Semester and Year^: Fall 2025

#### 11. Was this program listed in the most recent Academic Forecast?

□ Yes

 $\boxtimes$  No (If no, explain why below)

This program was not included in the Academic Forecast because it had not been approved through faculty governance.

12. Program Description (Provide a description of the program to be used in the Board of Regents meeting

packet):

The departments of Biological Science and Psychology, both within the Franklin College of Arts & Sciences, currently offer an area of emphasis in Neuroscience under their B.S. degrees. The content of these programs is being updated and integrated to create a major in Neuroscience (B.S.). The proposed major in Neuroscience strives to be top in the nation. Not only will it prepare students for success in a variety of related fields, but it will also promote the discovery of new ideas and methodologies related to this rapidly changing discipline.

Neuroscience is an expansive discipline that spans genetic, molecular, cellular, electrophysiological, pharmacological, structural, systemic, developmental, cognitive, behavioral, and clinical levels of analysis. Neuroscientists study how neural systems support sensory, perceptual, motor, and cognitive capabilities across species, including humans. Neuroscience research provides fundamental knowledge about how nervous systems develop and sustain appropriate, flexible, and healthy behaviors, how disrupted neural systems cause disease, and mechanisms by which those disruptions can be effectively treated. Multiple academic disciplines within and outside the Franklin College of Arts and Sciences contribute to neuroscientific knowledge, including cellular, chemical, and molecular biology, computation and mathematics, engineering, genetics, linguistics, medicine, pharmacology, philosophy, physics, and psychology. As a result, the study of neuroscience is critical for persons pursuing many academic and nonacademic careers.

The Bachelor of Science (B.S.) in Neuroscience is an interdisciplinary academic program dedicated to the comprehensive study of the nervous system. The curriculum encompasses a wide spectrum of academic and scientific approaches, including those from molecular and cellular biology, electrophysiology, systems neuroscience, behavior and cognition, and computational modeling. Students engage in coursework in core areas such as biology, neurophysiology, cellular and molecular neurobiology, neurogenetics, developmental neurobiology, and clinical and cognitive neuroscience. The curriculum is designed to offer flexibility, enabling students to customize their academic pathway by selecting specialized courses that align with their specific interests. This approach prepares graduates for careers in research, academia, healthcare, and industry, equipping them with the knowledge and skills required to excel in a variety of professional and academic settings.

A major in neuroscience opens multiple avenues for students depending on their own unique interests, including industry and sales (especially in pharmaceuticals and health-related fields), education, and work with government agencies, especially those focused on public health issues. Neuromarketing, or consumer neuroscience, is another growing field that is seeking neuroscientists to understand consumer behavior and decision-making processes at a neurological level. Neuroscience is also becoming influential in disciplines such as health disparities, philosophy, economics and law, as evidenced by the

development of new sub-fields in neuroscience such as neuro-ethics, neuro-economics, and neuro-law. The National Institutes of Health has granted over 19 billion dollars for biomedical and molecular imaging since 2019, both of which are subcomponents of neuroimaging, reflecting the importance of neuroscience in modern clinical and academic medicine.

13. Accreditation<sup>^</sup>: Describe disciplinary accreditation requirements associated with the program (if applicable, otherwise indicate not applicable).

Not applicable. There is currently no national accreditation agency that evaluates academic programs in Neuroscience.

14. Specify **SACSCOC** or other accreditation organization requirements^.

Mark all that apply.

- $\Box \Box$  Substantive change requiring notification only <sup>1</sup>
- $\Box$   $\Box$  Substantive change requiring approval prior to implementation <sup>2</sup>

 $\Box \Box$  Level Change <sup>3</sup>

None 🖉

# **B. STRATEGIC PLAN**

15. How does the program align with the USG System Wide/Strategic Plan Context (within mission fit):

The Bachelor of Science (B.S.) degree in Neuroscience closely aligns with the goal of the University System of Georgia 'to be recognized as the best system of higher education in the United States as it advances the prosperity of individuals, the state of Georgia, and the nation through education, research, engagement, and innovation.'

The program exemplifies the University System of Georgia's commitment to providing an affordable, accessible, and high-quality education. The program capitalizes on existing investments in facilities and cutting-edge faculty research to provide students with an innovative, interdisciplinary education that will serve the needs of the state of Georgia and beyond.

The proposed curriculum for the major in Neuroscience strives to be ranked among the top neuroscience programs in the nation. Proposed new courses and an enhanced existing course will provide students with career preparation and hands-on experience currently available at only a handful of institutions.

- <sup>2</sup> See page 17 (Requiring Approval Prior to Implementation) of <u>SACSCOC Substantive Change Policy and Procedures document</u>.
- <sup>3</sup> See page 3 (Level Change Application) of <u>SACSCOC Seeking Accreditation at a Higher or Lower Degree Level document</u> for level change requirements.

<sup>&</sup>lt;sup>1</sup> See page 22 (Requiring Notification Only) of <u>SACSCOC Substantive Change Policy and Procedures document</u>.

Two new career development courses will be mandatory for all students in the program. The first course, Neuroscience Careers Exploration, introduces undergraduates to the diverse career opportunities within neuroscience. It covers various professional paths, including research, clinical practice, industry roles, and academic positions. The second course, Neuroscience Career Development, is a capstone course that students must complete before graduation. In this course, students will present their undergraduate research in an academic conference-style symposium. Besides enhancing scientific research and communication skills, the course provides essential knowledge in career planning, job search strategies, networking, and professional development.

Three new hands-on courses and one enhanced laboratory course will provide unparalleled opportunities for students to gain experience with modern equipment used in research and healthcare settings. These courses will also help students apply critical thinking skills in the collection and analysis of neuroscience data. Two of the new courses will leverage existing investments in state-of-the-art imaging facilities at the University of Georgia's BioImaging Research Center (BIRC). The enhanced laboratory course will integrate data recorders, amplifiers and headstages suitable for conducting extracellular or intracellular recordings in neuroscience teaching laboratories with existing high-end electrophysiology equipment, microscopes, and other molecular/cellular research tools. Collectively, these new courses will equip students with a robust and cohesive knowledge base suitable for a wide range of careers in neuroscience. By providing students with a comprehensive skill set, the program will prepare graduates for a lifetime of impactful contributions at the state, national, and global levels.

16. How does the program align with your institutional mission and function^? If the program does not align, provide a compelling rationale for the institution to offer the program.

One of the mission goals of the University of Georgia is "a commitment to excellence in research, scholarship, and creative endeavors that are focused on organized programs to create, maintain, and apply new knowledge and theories; that promote instructional quality and effectiveness; and that enhance institutionally relevant faculty qualifications;" The proposed major in Neuroscience aligns with this and many other goals of the University in creating a program that will both prepare students for success in a variety of related fields, and also promotes the discovery of new ideas and methodologies related to the rapidly changing discipline.

17. How does the program align with your institution's strategic plan and academic program portfolio? Identify the number of existing and new courses to be included in the program.

The three mission-centered strategic directions of the University of Georgia are:

- 1. Promoting Excellence in Teaching and Learning
- 2. Growing Research, Innovation, and Entrepreneurship
- 3. Strengthening Partnerships with Communities Across Georgia and the Around the World

The proposed major in Neuroscience would advance all three of these by leveraging 32 courses already approved or offered in the biological and psychological disciplines with six new courses. The six new courses will provide career preparation and hands-on laboratory experience that will develop both the intellectual and technical skills needed for post-graduate employment.

New Courses:

- NEUR 2500: Neuroscience Careers Exploration (1 hr)
- NEUR 2800: Introduction to Neuroscience (3 hours)
- NEUR 3200: Advanced Human and Comparative Neuroanatomy (3 hours)
- NEUR 4600: Fundamentals of Neuroimaging (3 hours)
- NEUR 4700: Neuroimaging and Electrophysiology Data Analysis (3 hours)
- NEUR: 4950: Career Development in Neuroscience (1 hour)

Existing Course (approved but not offered due to budget constraints):

• DINEUR/CBIO 3800L: Neurobiology Laboratory (2 hours)

The major in Neuroscience aligns with the existing interdisciplinary Neuroscience Ph.D. program at the University of Georgia which began in 2006. This program has graduated nearly 100 students since its inception and maintains an annual enrollment of 25-30 students. Roughly 5 students per year are accepted to the program out of 160-200 that apply.

# C. NEED

18. To what extent does the program align with local, regional, and/or state talent demand or workforce strategies?

The field of neuroscience has seen significant growth over the past few decades, as evidenced first in the 1990s being dedicated as "the decade of the brain" by then President Bush. Since then, the need has only grown. With an aging population, the incidence of neurological disorders such as Alzheimer's and Parkinson's disease is on the rise, increasing the demand for neurologists and healthcare providers with expertise in neuroscience. The development of personalized medicine, based on genetic profiling, is further expected to increase the need for healthcare professionals trained in both neuroscience and genetics.

Advances in neuroimaging techniques are resulting in a greater demand for radiologists and technologists proficient in the latest technologies. Neuro-rehabilitation is another growing field within healthcare that requires the expertise of neuroscientists to develop and apply therapies and technologies to assist patients with neurological impairments.

In the tech industry, the demand for neuroscientists has risen steadily. Companies are exploring the potential of brain-computer interfaces (BCIs), which could revolutionize the way users engage with technology.

The breadth of neuroscience opens additional avenues for students depending on their own unique interests, including industry and sales (especially in pharmaceuticals and health-related fields), education and work with government agencies, especially those focused on public health issues. Neuromarketing, or consumer neuroscience, is another growing field that is seeking neuroscientists to understand consumer behavior and decision-making processes at a neurological level. Neuroscience is also becoming influential in disciplines such as health disparities, philosophy, economics and law, as

evidenced by the development of new sub-fields in neuroscience such as neuro-ethics, neuro-economics, and neuro-law. The National Institutes of Health has granted over 19 billion dollars for biomedical and molecular imaging since 2019, both of which are subcomponents of neuroimaging, reflecting the importance of neuroscience in modern clinical and academic medicine.

The program is designed to serve the needs of the state of Georgia as well as the nation. According to the Bureau of Labor Statistics, the demand for neuroscientists and related professions is projected to grow an average of 6% nationally and 14% within the state of Georgia from 2018 to 2028. This growth is driven by the increasing need for advancements in understanding of brain function, neurological disorders, and an aging population. These needs are extensive, and span social, clinical, and basic scientific levels.

19. Was this proposal and the design of the curriculum informed by talking with alumni, employers, and community representatives or other evidence of demand (e.g. employment sector trends, clearly defined learner demand, complement to an existing program, meeting a persistent, new, or emerging demand for knowledge and innovation).

 $\square$  No

 $\boxtimes$  Yes (If yes, use the space below to explain how their input informed this proposal)

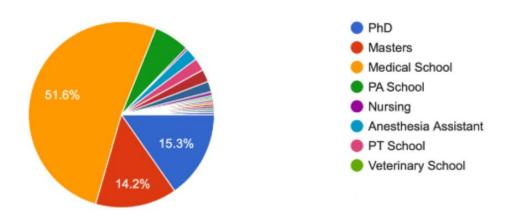
The curriculum has been developed with input from employers, alumni, students, and professional organizations such as The Society for Neuroscience (SfN). SfN is a nonprofit professional society for scientists and physicians who study the brain and nervous system and has nearly 35,000 members. Its program includes professional development resources, career training, and curriculum development resources.

The proposed Neuroscience (B.S.), currently offered as an area of emphasis, is in high demand. At the University of Georgia, 431 students are currently enrolled as psychology or biology majors with an area of emphasis in neuroscience. From FY 2015 to FY2024, nearly 800 students graduated with a first concentration in Neuroscience. The growth rate during this time has averaged 20%.

A survey of Undergraduate Neuroscience Organization (UNO) members at the University of Georgia was conducted in fall 2024, and similar surveys were conducted in 2019 and 2015. More than 90% of respondents indicated they would be "interested" or "extremely interested" in majoring in Neuroscience if it were offered at the University of Georgia. 36% of respondents said they considered attending another institution because of their neuroscience major, and many students indicated they were considering or planning to transfer to another institution to allow them to complete a major in neuroscience.

Of the 280 respondents in 2024, 97% plan to pursue additional education beyond the bachelor's degree: 52% plan to attend medical school, 30% a master's or doctoral program, and 18% various healthcare related programs, such as physician's assistant, physical therapy, anesthesia assistant, or nursing.

# If pursuing higher education, what are your plans? 275 responses



The surveys conducted since 2015 of over 1,000 undergraduate students in STEM disciplines at the University of Georgia have documented the strong desire of students at UGA to have access to a Bachelor of Science degree in Neuroscience (rather than the existing area of emphasis).

20. Identify the partners you are working with to create a career pipeline with this program<sup>4</sup>.^

Mark all that apply		
□ High School CTAE	$\boxtimes$ Other USG institutions	$\boxtimes$ Professional associations
□ High School STEM	$\boxtimes$ Other universities	$\boxtimes$ Other (specify below)
□ Career academies	⊠ Employers	
□ TCSG programs	Community partnerships	□ None

Three new courses are being added that will be required for all students. An exposure course that surveys career opportunities in the field through team teaching, and presentations from professionals across a wide range of occupations. An introductory course that covers basic biological and behavioral topics in neuroscience. A capstone-type class requires presentation of research at a conference-style event, scientific communication (writing, speaking), and professional development (including relevant topics for optimizing career readiness).

Students who identify Neuroscience as a major interest, and who meet other academic qualifications, are invited to join UGA's chapter of Nu Rho Psi – the only nationally-recognized honor society in the area of brain research. Students who become members of Nu Rho Psi have opportunities for career development in neuroscience and related fields, as well as internships and other interactions with faculty and professionals in neuroscience and related fields.

Neuroscience faculty in Cellular Biology and Psychology belong to professional organizations that foster student mentoring and networking opportunities. The Society for Neuroscience (SfN) includes a Job Board (<u>https://neurojobs.sfn.org/careers/</u>) as well as an annual conference (and a members website) with mentoring and professional development. Another resource is the DANA Foundation Career Network in Neuroscience and Society (<u>https://neuroxcareers.org/</u>)

21. Are there any competing or complementary programs at your own institution?

 $\square$  No

 $\boxtimes$  Yes (If yes, provide additional information about the competing program(s) below).

The University of Georgia currently offers an Area of Emphasis in Neuroscience under Psychology (B.S.) and Biology (B.S.). The area of emphasis under both programs will be eliminated upon approval of the neuroscience major.

22. The program service area is used as the basis for labor market supply and demand analysis. What is the program's service area (local, regional, state, national)? If outside of the institution's traditional service area, provide a compelling rationale for the institution to offer the program. If the program's service area is a region within the state, include a map showing the counties in the defined region.

The program is designed to serve the needs of the state of Georgia as well as the nation. According to the Bureau of Labor Statistics, the demand for neuroscientists and related professions is projected to grow an average of 6% nationally and 14% within the state of Georgia from 2018 to 2028. This growth is driven by the increasing need for advancements in understanding of brain function, neurological disorders, and an aging population. These needs are extensive, and span social, clinical, and basic scientific levels.

23. Do any other USG higher education institutions in close proximity or sector service area offer a **similar** program?

Within the University System of Georgia, the Georgia Institute of Technology, Georgia State University, and Augusta University offer a major in Neuroscience. The supply of graduates from these institutions is substantially less than the 2,000 projected annual job openings in neuroscience occupations. The current annual total of graduates from Georgia institutions, both public and private, is roughly 400. Augusta University hasn't yet produced any graduates due to the recent introduction of their major, but even after accounting for their program, demand will greatly exceed supply.

The interdisciplinary nature of the program is designed with flexibility, to allow students to tailor their education to the rapidly expanding breadth of career options. The major in Neuroscience at the University of Georgia will address the exceptional growth in neuroscience occupations projected within the state of Georgia.

 $<sup>\</sup>square$  No  $\square$  Yes (If yes, provide a rationale for the institution to offer the program)

Undergraduates of the major in Neuroscience at the University of Georgia will benefit from existing collaborations of neuroscience faculty within the state. One example is the Georgia Clinical & Translational Science Alliance (Georgia CTSA) that concentrates basic, translational, and clinical research investigators, community clinicians, professional societies, and industry collaborators in dynamic clinical and translational research projects. The Alliance is comprised of Emory University, Morehouse School of Medicine, Georgia Tech, and UGA, and was formed with grant funding from the National Center for Advancing Translational Sciences to improve the way biomedical research is conducted across the country. Undergraduates in the Neuroscience major will be able to participate in translational research in alignment with the Georgia CTSA.

Similar or Related Degrees/Programs	CIP Code	Supply <sup>1</sup> (Graduates/Completers)	Competitor Institutions <sup>2</sup>
Neuroscience	26.15	90	Georgia Institute of Technology
Neuroscience	26.15	95	Georgia State University
Neuroscience	26.15	0	Augusta University

#### 24. Using IPEDS data, list the supply of graduates in the program and related programs in the service area.

<sup>1</sup>Supply = Number of program graduates last year within the study area

<sup>2</sup>Competitors = List other USG institutions that offer this program or a similar program in the area (see Question 23)

25. Based on the program's study area, what is the employment outlook for occupations related to the program. An Excel version of the CIP to SOC crosswalk is also available from <u>NCES</u>. If data for the study area is not available, then use state- or national-level data. Only list the jobs that are highly aligned and likely to be those for which you are preparing students and not every possibility.

**Possible resources:** 

- Click here for US and Georgia occupation projections
- Click here for 2026 Georgia Department of Labor data projections for the State or Georgia Workforce Board Regions in Qlik (link to GDOL Projections); data is also available through the <u>GDOL Labor Market Explore</u> <u>Website</u>
- For a custom Georgia geography request a Jobs EQ report from USG Academic Affairs office.
- Using data from *O*\*-*Net*, identify the average salary for the related occupations identified in question.

Occupation	O*Net <sup>1</sup>	Current Employment	% Growth	Average Salary (O-Net data)	Future Earnings Potential (O-Net data)
Clinical Research Coordinators	11-9121	1,190	6	\$108,480	168,830
Biochemists and Biophysicists	19-1021	300	10	\$60,460	126,370
Medical Scientists, Except Epidemiologists	19-1042	2,110	21	\$89,730	154,490
Neuropsychologists	19-3039	1,180	10	\$121,330	154,340

#### Labor Market/Career Placement Outlook/Salary:

Psychiatrists	29-1223	300	17	\$239,200+	239,200+
Medical and Clinical Laboratory Technologists	29-2011	11,750	18	\$60,780	90,170

<sup>1</sup>National Center for O\*NET Development. O\*NET OnLine. Retrieved September 2024 from <u>https://www.onetonline.org/</u>

26. Based on the data provided in questions 24 and 25, discuss how this program will help address a need or gap in the labor market?

(Provide letters of support and explain the collaboration and how partners will share or contribute resources. Consider internal pipeline programs – "off-ramp programs," Nursing to integrated health, or MOUs for pathways with other USG institutions (pipelines – keep them in state for grad school if possible).

Based on data from O\*-Net, projected job growth throughout the U.S. is high for careers in neuroscience and is even higher within the state of Georgia. The number of graduates from institutions within the state of Georgia is significantly below the need projected by O-Net. Given the growing influence of neuroscience on other disciplines such as philosophy, economics and law, there will likely be new occupational categories related to neuroscience in the future that aren't reflected in the current projections.

BLS Code	BLS Description	Project Annual GA Job Openings
11-9121.01	Clinical Research Coordinators	90
19-1021	Biochemists and Biophysicists	30
19-1042	Medical Scientists, Except Epidemiologists	210
19-3039.02	Neuropsychologists	90
29-1217	Neurologists	550
29-1223	Psychiatrists	20
29-2011	Medical and Clinical Laboratory Technologists	1,010
	Total	2,000

27. Using data from *O\*-Net*, identify the average salary for the related occupations identified in question 24. Then list at least three technical skills and three Knowledge, Skills and Abilities (KSAs) associated with the related occupations. This information can be found using at <u>onetonline.org</u>.

Occupation	SOC Code	Occupation specific technology skills & KSAs
Clinical Research	11-9121	Analytical or scientific and database query software,
Coordinators		reading comprehension, customer and personal service,
		deductive reasoning
Biochemists and	19-1021	Analytical or scientific and graphics software, critical
Biophysicists		thinking, scientific methods, reading comprehension,
		biology, chemistry
Medical Scientists, Except	19-1042	Analytical or scientific and database query software,
Epidemiologists		biology, chemistry, writing, active learning, science,
		inductive reasoning
Neuropsychologists	19-3039	Analytical or scientific and database query software,
		active listening, reading comprehension, critical thinking
Neurologists	29-1217	Medical software, active listening, complex problem
		solving, inductive and deductive reasoning
Psychiatrists	29-1223	Graphics and medical software, active listening, social
		perceptiveness, critical thinking, oral comprehension, oral
		expression
Medical and Clinical	29-2011	Medical and office software, active listening, critical
Laboratory Technologists		thinking, biology, written comprehension

Provide any additional comments, if needed:

28. Based on the data compiled and analyzed for this section (see Section C: Need), what is the job outlook for occupations filled by students with this degree?<sup>^</sup>

The job outlook for students graduating with a major in neuroscience is high, both in terms of availability of jobs and earning potential. In addition to the careers listed above, many new career areas are emerging as the field of neuroscience matures. Projected job growth in Georgia for students majoring in neuroscience is much higher than projected for other parts of the country.

BLS Code	BLS Description	Projected GA Growth %	Projected US Growth %
11-9121.01	Clinical Research Coordinators	6	5
19-1021	Biochemists and Biophysicists	10	7
19-1042	Medical Scientists, Except Epidemiologists	21	10
19-3039.02	Neuropsychologists	10	5
29-1217	Neurologists	18	3
29-1223	Psychiatrists	17	7
29-2011	Clinical Laboratory Technologists	18	5

#### **D. CURRICULUM**

29. Enter the number of credit hours required to graduate and/or complete the program^

Click or tap here to enter text.120

30. Are you requesting a credit hour requirement waiver (either below or above traditional credit hour length requirements as prescribed by the University System of Georgia? See section 2.3.5 (Degree Requirements) of the USG Board of Regents Policy Manual here for more information).



 $\Box$  Yes (If yes, explain the rationale for the request in the space below)

31. Delivery Mode: related to SACSCOC accreditation, specify if the program format of the proposed program is a^:

	Format (Check 1)	P	Program Percentage
Х	On Campus		<50%
	On Campus AND Online		50-94%
	Online	Х	95-100%
	Partially Online		Unknown
	External Campus/Online/External	/	
	On Campus & External		

32. Is the program synchronous or asynchronous?<sup>5</sup> Mark one of the options below.

**Synchronous** 

The majority of courses are offered at scheduled, pre-determined times with students connecting to a virtual room or location and interacting with faculty and fellow students via web/video conferencing platform.

□ Asynchronous

- 33. For **ALL** degree proposals, which **High Impact Practices**<sup>6</sup> (HIPs) will faculty embed into the program? Mark all that apply.
  - Tutomohino
  - □ Internships
  - Common Intellectual Experiences
  - □ Diversity/Global Learning
  - □ ePortfolios
  - Service Learning, Community Based
    - Learning

- ⊠ First-Year Experiences
- $\boxtimes$ Undergraduate Research
- $\boxtimes$  Capstone Courses and Projects
- □ Learning Communities
- $\boxtimes$  Writing-Intensive Courses
- Collaborative Assignments and Projects

<sup>&</sup>lt;sup>1</sup>Direct measures may include assessments, HIPs, exams, etc.

<sup>&</sup>lt;sup>6</sup> See Kuh (2008). High-Impact Practices: What They Are, Who Has Access to Them, and Why They Matter. *Association of American Colleges and Universities*, *14*(3), 28-29).

34. For **ALL** degrees, discuss how **HIPs** will be embedded into the program? Your discussion should provide specific examples and include whether the HIP is required or an optional component. It should also indicate at what point the experience is offered or required.

**First-Year Experiences** - Faculty in the Neuroscience program will offer First-Year Odyssey Seminar (FYOS) courses that emphasize various aspects of neuroscience. FYOS will be available to all first-year students, not only those in the Neuroscience major.

**Common Intellectual Experiences** – All students enrolled in the Neuroscience degree program will take the same core courses, as well as an exposure course that surveys career opportunities in the field through team teaching, and presentations from professionals across a wide range of occupations (typically fall of the second year). All students will also take an introductory course which covers basic biological and behavioral topics in neuroscience (typically fall of the third year) and a capstone-type class, typically fall of the final year.

**Writing-Intensive Courses** – All students in the Neuroscience degree program must take the capstone course which includes a writing component. Additionally, students are encouraged to complete an Undergraduate Research Thesis or Final Project. These courses aim to enhance students' writing competence and engagement by treating writing as a learning process. Students have several opportunities for constructive feedback and guidance on writing. Students are encouraged to revise their work based on feedback to improve their writing skills.

**Collaborative Assignments and Projects** – Most of the undergraduate research projects discussed below will involve working with other undergraduate and graduate students, as well as post-doctoral scholars, research staff, and Principal Investigators.

**Service Learning, Community Based Learning** – Neuroscience degree program students will have the opportunity to volunteer for experiential learning opportunities on campus, with one of the many community based mental health organizations, or complete a service learning class.

**Undergraduate Research** – Hands-on research experiences as an undergraduate significantly enhance a student's prospects for graduate school, advanced academic and professional training programs, and securing a job after graduation. The proposed Neuroscience major addresses this need in two ways.

First, the program proposes to offer four structured laboratory experiences designed to provide students with hands-on real world research activities that will allow them to develop essential skills and gain valuable experience that they can then use in professional laboratories as part of a research opportunity or career as a research scientist.

Second, all students in the Neuroscience degree program will be required to carry out at least three credit hours of neuroscience related research under the direction of affiliated faculty member or an approved supervisor. Students are encouraged to complete an Undergraduate Research Thesis or Final Project.

**Capstone Courses and Projects** – All Neuroscience degree program students will complete a capstone course that focuses on the development of scientific research and communication skills. Students are also encouraged to complete an Undergraduate Research Thesis or Final Project.

They will present their work during an academic conference-style symposium. This will likely occur in their final year.

35. Does the program take advantage of any USG initiatives?

Mark all that apply, and provide a letter of support from applicable initiatives' leadership.

[] eCampus	[] Georgia Film Academy
[] FinTECH	[] Other: Specifiy Initiative Here

36. List the learning outcomes for the program? Attach the curriculum map for the upper division or major curriculum.

Student learning outcomes:

- 1. Students will demonstrate a comprehensive understanding of the structure and function of the nervous system with a depth of knowledge to include the cellular/molecular and behavioral/cognitive perspectives.
- 2. Students will learn and apply laboratory skills relevant to neuroscience research, such as electrophysiology, imaging techniques, and cellular/molecular biology methods.
- 3. Students will apply their understanding of neuroscience to real-world situations.
- 4. Students will apply critical thinking and analytical skills to identify assumptions and relevant information to analyze a case or problem and identify potential solutions.
- 5. Students will demonstrate strong oral and written communication skills by presenting information clearly and effectively, both in written reports and oral presentations.

Course #	Title	Hours
Fall Year 2	-	
NEUR 2500	Neuroscience Careers Exploration	1
Spring Year 2		
GENE 3200/D	Genetics	4
Fall Year 3		
PSYC 4140	Cognitive Neuroscience	3
NEUR 2800	Introduction to Neuroscience	3
Spring Year 3		
CBIO 3800	Neurobiology	4
Choice	Major Related Elective	3
Fall Year 4		
NEUR 4950	Neuroscience Career Development	1

# **Curriculum Map:**

CBIO 4980R	Faculty Guided Research	3
CBIO 4990	Fourth Year Seminar	1
Spring Year 4		
Choice	Major Related Elective	3-4
Choice	Major Related Elective	3

# 37. For ALL degree proposals, fill in the table below to demonstrate the link between the learning outcomes and NACE <u>career ready competencies</u>. Insert more rows as needed.

Insert more rows as needed.		
Career Ready Competencies (NACE)	Student Learning Outcomes	Direct Measure (s) <sup>1</sup>
Critical Thinking/Problem Solving	Demonstrate the ability to consider, analyze, and evaluate information to develop and support sound conclusion(s).	Students will be evaluated on their ability to: (1) Make decisions and solve problems using sound, inclusive reasoning and judgment. (2) Gather and analyze information from diverse sources to fully understand a problem. (3) Proactively anticipate needs and prioritize action steps. (4) Assess the accuracy in summarizing and interpreting data, while being aware of personal biases that may impact outcomes. These measures will be observed in courses, especially experiential and laboratory offerings, through
		methods including performance tasks, case studies, and real-world problem-solving.
Analytical Thinking	Demonstrate the ability to reason, interpret, analyze, and solve problems from a wide array of authentic contexts.	Students will be evaluated on specific behaviors and skills that demonstrate a student's ability to analyze information and solve problems effectively, including: (1) How well a student gathers and analyzes information from diverse sources to understand a problem. (2) The ability of a student to use logical reasoning to make decisions and solve problems.

		<ul> <li>(3) Assess accuracy in summarizing and interpreting data, while being aware of personal biases that may impact outcomes.</li> <li>(4) Assess how proactively a student anticipates needs and prioritizes action steps.</li> <li>These measures will be observed in courses, especially experiential and laboratory offerings, through methods including performance tasks, case studies, and real-world problem-solving.</li> </ul>
Oral/Written Communications	Demonstrate the ability to assimilate, interpret, and analyze the content of written information from various disciplines. Students will be able to compose and present information in oral or written form that is stylistically appropriate for various academic and/or professional contexts.	Direct measures of this competency include: (1) Presentations: Evaluating the clarity, organization, and delivery of oral presentations. (2) Written Reports: Assessing the structure, coherence, and effectiveness of written communication. (3) Peer Reviews: Collecting feedback from peers on communication effectiveness in group projects.
Team Work/ Collaboration	Demonstrate an ability to foster a constructive team environment, using mature interpersonal skills, to effectively work with others toward a common goal.	Direct measures of this competency include: (1) Group Projects: Evaluating the effectiveness of collaboration and contribution in team-based assignments. (2) Peer Evaluations: Collecting feedback from team members on an individual's ability to work collaboratively. (3) Conflict Resolution: Assessing how well an individual manages and resolves conflicts within a team. (4) Team Presentations: Observing the coordination and collective effort in delivering a group presentation.
Digital Technology	Utilize common digital tools such as spreadsheets, presentation tools, and data analysis tools.	Direct measures of this competency include: (1) Technical Assessments: Evaluating proficiency in specific software, tools, or programming

Leadership Professionalism/ Work	Demonstrate the capacity to engage in the relational process of optimizing personal and collective strengths toward a common goal. Perform effectively as a leader in an interdisciplinary team	languages through tests or practical tasks. (2) Project Work: Assessing the use of digital tools and technologies in completing projects, including the ability to choose appropriate technologies and apply them effectively. (3) Digital Portfolios: Reviewing digital portfolios that showcase an individual's work, demonstrating their ability to use various technologies as applied to analyzing complex or multidimensional neuroscience related datasets (4) Simulations: Using simulations or role-playing scenarios to evaluate how individuals adapt to new and emerging technologies. (5) Performance Reviews: Gathering feedback from instructors or peers on the effective use of digital tools to analyze data. Direct measures of this competency include: (1) Leadership Projects: Evaluating the effectiveness of leading a project or initiative, including planning, execution, and outcomes. (2) 360-Degree Feedback: Collecting comprehensive feedback from peers and instructors on leadership behaviors and effectiveness. (3) Self-Assessments: Using tools like the Leadership Practices Inventory (LPI) to self-evaluate leadership skills and identify areas for improvement. Direct measures of this
Professionalism/ Work Ethic	Demonstrate the ability to understand ethical behavior in social applications, apply societal ethics to scientific inquiry, and explain how ethical principles provide justification for standards of conduct.	

Career Management	Understand the breadth of career	<ul> <li>(2) Self-Assessments: Using tools like the Professionalism Self- Assessment to reflect on and improve work habits and behaviors.</li> <li>(3) Peer Feedback: Collecting feedback from peers on professional behavior and work ethic.</li> <li>(4) Observation: Instructors observing and noting professional conduct, such as adherence to dress codes and workplace etiquette of students</li> <li>(5) Project Management: Assessing the student's ability to manage time and workload effectively through the completion of projects and tasks.</li> <li>Direct measures of this</li> </ul>
	options and required education	competency include:
	and skill required in relevant	(1) Career Development Plans:
	areas of interest	Evaluating the creation and
		execution of personal career
		development plans, including
		setting goals and identifying steps to achieve them.
		(2) Self-Assessments: Using tools
		like the Career Management Self-
		Assessment to reflect on career
		goals, strengths, and areas for
		improvement.
		(3) Mentorship Feedback:
	/	Collecting feedback from mentors
		on career planning and progress.
		(4) Networking Activities:
		Assessing participation in
		networking events, professional associations, and other career-
		building activities.
Global/Intercultural	Demonstrate an understanding of	Direct measures of this
Fluency	the complexity of elements	competency include:
	important to members of another	(1) Evaluating performance in
	culture, outside the U.S., in	projects that require collaboration
	relation to its history, values,	with individuals from diverse
	politics, communication styles,	backgrounds.
	economy, or beliefs and practices	(2) 360-Degree Feedback:
		Collecting feedback from team
		members and instructors on an

	individual's ability to work
	inclusively.

#### 38. How will outcomes for graduates of the program be assessed?

(Outcomes may include employment and placement rates, student or employer surveys, or other assessments of graduate outcomes)

**Neuroscience Advisory Committee:** An advisory committee will be formed to proactively assess the program and consider best practices in creation, adoption and approval of new courses.

**Alumni Survey**: Neuroscience alumni will be asked to complete a survey every 3 years that assesses their post-baccalaureate education, employment and placement. It will also inquire about the area of neuroscience they've pursued, which courses or activities they consider to be the most valuable, and which could be improved or modified. The Neuroscience Advisory Committee will collect the survey responses, and the department heads will tabulate the results and report them to the faculty at the annual faculty meeting. This is an indirect assessment of all learning outcomes.

39. List the entire course of study required to complete the academic program.

- Include course: prefixes, numbers, titles, and credit hour requirements
- Indicate the word "new" beside new courses
- Include a program of study

#### **Major Requirements**

A baccalaureate degree program must require at least 21 semester hours of upper division courses in the major field and at least 39 semester hours of upper division work overall.

#### Required Courses (20-23 hrs):

#### Neuroscience (5 hrs)

(New) NEUR 2500 (1 hr) - Neuroscience Career Exploration
(New) NEUR 2800 (3 hrs) - Introduction to Neuroscience
(New) NEUR 4950 (1 hr) - Neuroscience Career Development

#### Cellular Biology (8-11 hrs)

CBIO 3800 (4 hrs) - Neurobiology CBIO 4980R (3-6 hrs) - Faculty Guided Research CBIO 4990 (1 hr) - Fourth Year Seminar

<u>Genetics (4 hrs)</u> GENE 3200-3200D or GENE 3200H (4 hrs) - Genetics

<u>Psychology (3 hrs)</u> PSYC 4140 (3 hrs) - Cognitive Neuroscience

#### A minimum of 9 hours from the following:

(New) NEUR 3200 (3 hrs) – Advanced Human and Comparative Neuroanatomy (New) NEUR 4600 (3 hrs) - Fundamental Neuroimaging (New) NEUR 4700 (3 hrs) - Neuroimaging and Electrophysiology Data Analysis ANTH 4790/6790 (3 hrs) - Human Adaptation BCMB 3100 (4 hrs) - Introductory Biochemistry and Molecular Biology BCMB 4120/6120 (4 hrs) - Human Biochemistry and Disease BCMB 4130 (4 hrs) - Human Biochemistry II BCMB 4130H (4 hrs) - Human Biochemistry II (Honors) BIOL 3110L (4 hrs) - Basic Skills in the Laboratory CBIO3000/L (4 hrs) - Comparative Verebrate Anatomy CBIO 3010-3010L (4 hrs) - Functional Human Anatomy CBIO3200L (1-3 hrs)--Medical Anatomy CBIO 3400 (4 hrs) - Cellular Biology CBIO 3600 (4 hrs) - Developmental Biology CBIO 3410L (4 hrs) - Laboratory in Cellular and Developmental Biology CBIO 3800L (2 hrs) - Neurobiology Laboratory CBIO 4200 (3 hrs) - Biomedical Research in Health and Disease CBIO 4200H (3 hrs) - Biomedical Research in Health and Disease (Honors) CBIO 4730/6730 (3 hrs) – Endocrinology CBIO(CSCI) 4835/6835 (3 hrs) - Introduction to Computational Biology GENE(CBIO) 4310 (3 hrs) - Genetic Approaches to Developmental Neuroscience GENE 4500/6500 (3 hrs) - Human Genetics PSYC 3230 (3 hrs) - Psychopathology PSYC 3810 (3 hrs) - Psychology of Health PSYC 4120 (3 hrs) - Sensation and Perception PSYC 4130 (3 hrs) - Physiological and Comparative Psychology PSYC(GRNT) 4700 (3 hrs) - Psychology of Aging PSYC 4150 (3 hrs) - Biological Foundations of Health Psychology PSYC 5770/7770 (3 hrs) - Organization of Primate Social Groups PSYC 5850 (3 hrs) - Psychopharmacology – Drugs and Behavior

**General Electives (20-23 hours)** At least 14 of the will need to be upper-division courses to meet the 39 required hours of upper-division coursework.

# E. IMPLEMENTATION

40. Provide an enrollment projection for the next four academic years^

	Year 1	Year 2	Year 3	Year 4
Fiscal Year (Fall to Summer)	2025-26	2026-27	2027-28	2028-29
Base enrollment <sup>1</sup>		360	375	380
Lost to Attrition (should be negative)		-15	-15	-15
New to the institution	110	120	140	150

Shifted from Other programs within your institution	350	20	0	0
Total Enrollment	460	485	500	515
Graduates	-100	-110	-120	-125
Carry forward base enrollment for next year	360	375	380	390

<sup>1</sup>Total enrollment for year 1 becomes the base enrollment for year 2

a. Discuss the assumptions informing your enrollment estimates (i.e. for example, you may highlight anticipated recruiting targets and markets, if and how program implementation will shift enrollment from other programs at the institution, etc.)

The proposed major in Neuroscience, currently offered as an area of emphasis, is in high demand. At the University of Georgia, 431 students are currently enrolled as psychology or biology majors with an Area of Emphasis in Neuroscience. In a recent survey, 91% of students currently enrolled indicated they would be very likely to change their major to Neuroscience if it were offered. From FY 2015 to FY2024, 795 students graduated from the University of Georgia with a B.S. in Biology or B.S. in Psychology and an Area of Emphasis in Neuroscience. The Area of Emphasis in Neuroscience has exhibited a sustained growth rate of about 20% since its inception. Surveys conducted annually since 2015 of over 3,000 undergraduate students in STEM disciplines at the University of Georgia have documented the strong desire among students at UGA for access to a major in Neuroscience rather than an area of emphasis.

The demand for a major in Neuroscience is not only high at the University of Georgia, but also in the state of Georgia and nationally among undergraduate students. Over the past five years, the number of Bachelor of Science degrees in Neuroscience awarded in the United States has been increasing by about 9% per year. This growth is a testament to the interdisciplinary nature of Neuroscience, which combines elements of biology, psychology, philosophy, chemistry, and physics, making it an attractive option for students interested in understanding the brain and nervous system. The high interest in neuroscience is driven by the current and projected job outlook for people majoring in neuroscience. Collectively, these metrics indicate enrollment in a neuroscience major at the University of Georgia will be robust in the foreseeable future.

b. If projections are significantly different from enrollment growth for the institution overall, please explain.

Enrollment estimates for the major in Neuroscience are based on current enrollment numbers for students identified as Psychology or Biology major with an Area of Emphasis in Neuroscience. Projections for growth are based on the current growth rate for the neuroscience area of emphasis and estimates of demand for such a program within the state of Georgia and United States. The growth rate of the program will be aligned with the goals of the institution. The assumptions

consider the University of Georgia Strategic Enrollment Management Plan 2024-2028, with a planned average growth rate of 1% per year while maintaining an 80/20 Georgia residency composition and enhancing geographic representation of the first-year cohort within the state and across the nation. Provision of a Neuroscience major at the University of Georgia is expected to be attractive to academically outstanding students planning to go to college or transfer from institutions that do not offer comparable degrees. Additionally, students receiving a Bachelor of Science (B.S.) degree with a major in Neuroscience from the University of Georgia are expected to be competitive in the job market, thereby improving the economic and social mobility of UGA graduates.

41. If projected program enrollment is not realized in year two, what actions are you prepared to take?

If projected program enrollment is not realized in year two, the program will elevate the visibility of the program using social media, engage in targeted recruitment of high schools within the state of Georgia, and engage in targeted recruitment of transfer students. However, the likelihood of low enrollment in the program is judged to be very low based on current metrics from the neuroscience emphasis program and estimates of demand within prospective students.

42. Discuss the marketing and recruitment plan for the program. Include how the program will be marketed to adult learners and underrepresented and special populations of students. What resources have been budgeted for marketing the new program?

An Advisory Committee will be formed, in consultation with the Department Heads of Psychology and Cellular Biology, will provide suggestions and materials for marketing and recruitment for the program. The program will be marketed using social media and through engagement with high-schools and smaller institutions of higher learning in Georgia and surrounding states that do not offer neuroscience research opportunities.

43. Provide a brief marketing description for the program that can be used on the Georgia OnMyLine

# website.

Neuroscience at the University of Georgia offers an interdisciplinary approach to understanding the complexities of the brain and nervous system. This program integrates knowledge from biology, psychology, and chemistry to provide a comprehensive education in neuroscience. Students will explore topics such as neural development, brain function, behavior, and neurological disorders through a combination of coursework, laboratory research, and hands-on experiences. With access to state-of-the-art facilities and opportunities for collaborative research, graduates will be well-prepared for careers in healthcare, research, biotechnology, and beyond. Join us at UGA to embark on a journey of discovery and innovation in the fascinating field of neuroscience!

44. If this proposal is for a Doctorate program, provide information below for at least three external and

one USG reviewer of aspirational or comparative peer programs.

Not Applicable

#### administrative titles.

*Note:* It is the responsibility of the institution proposing the doctoral degree program to attain external reviews and submit those reviews to their proposal.

#### **Reviewer 1 Name**

Reviewer 1 Title Reviewer 1 Institution Reviewer 1 Email Address Reviewer 1 Phone Number

#### **Reviewer 2 Name**

Reviewer 2 Title Reviewer 2 Institution Reviewer 2 Email Address Reviewer 2 Phone Number

#### **Reviewer 3 Name**

Reviewer 3 Title Reviewer 3 Institution Reviewer 3 Email Address Reviewer 3 Phone Number

#### **USG Reviewer Name**

USG Reviewer Title USG Reviewer Institution USG Reviewer Email Address USG Reviewer Phone Number

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## F. RESOURCES

### F1. Finance<sup>^</sup>: Complete and submit the Excel budget forms and the questions below

(Do <u>not</u> cut and paste in the excel budget template into this document, submit the Excel budget templates separately.)

- 45. Are you requesting a differential tuition rate for this program? (masters, doctoral, and professional programs only)
  - $\boxtimes$  No (Move to answer question 48)
  - $\Box$  Yes (If yes, answer questions 47a & 47b)
  - a. What is the differential rate being requested? The rate below should reflect the core tuition <u>plus</u> the differential, i.e. the tuition rate being advertised to the student.

In-State per Semester: \$Enter Amount

Out-of-State per Semester: \$Enter Amount

#### **Not Applicable**

b. Provide tuition and mandatory fee rates assessed by competitive/peer programs <u>per full-time</u> <u>student per semester</u>. Please complete the table below:

Institution name	Link to institution's tuition & fee website	In-state tuition	Out-of- state tuition	In-state fees	Out-of- state fees
Not Applicable					

46. If existing funds are being reallocated, describe the impact on existing programs and the plan to mitigate these impacts.

The existing Area of Emphasis in Neuroscience under the Psychology and Biology majors both are under the Franklin College of Arts & Sciences. Reallocation of funds will be managed by the college.

47. If student fees are being charged (excluding mandatory fees), explain the cost and benefit to students, per fee.

Not Applicable

48. Are there any additional financial costs that students will have to take on as part of this program, but not assessed directly by the institution? (e.g. software licenses, equipment, travel, etc.) If so, please describe these costs and what strategies you have considered to decrease the student's financial burden?

Not Applicable

49. How does the institution plan for and fund increased indirect costs associated with the growth in students anticipated in the proposed program? Consider costs such as student advisement, student support services, tutoring, career services, additional library materials, technology, or other infrastructure.

An Undergraduate Coordinator Assistant is included in the budget to help manage the increased advising load, ensuring that each student receives timely and personalized guidance on course selection, career planning, and academic progress.

To ensure effective management and integration between the departments of Cellular Biology and Psychology, a Neuroscience Advisory Committee will be created. The Chair of the Neuroscience Advisory Committee will serve as the Director of the major in Neuroscience.

#### F2. Faculty<sup>^</sup> – Explain your faculty and staff plan for the program

50. Discuss how existing courses may be incorporated into this new program:

a. Course Development

# of total courses in the curriculum:
# of existing courses to be part of the new program
32
Net number of new courses to be developed
6

Seven of the 38 courses are required while the rest are available as elective options. Three of the required courses and three of the elective courses are new.

b. Comment on the costs and workload related to the new course development.

Course development for four of six new courses was performed as part of the major proposal development. The two new courses in imaging data collection and analysis will be developed by existing faculty and new faculty hires in collaboration with the Neuroscience Advisory Committee.

#### 51. Explain how current faculty and staff will contribute to the program.^

a. How many faculty will be re-directed to this program from existing programs?

#### **Enter** # 0

The program transforms two existing areas of emphasis in Neuroscience that have been offered since 2015 into an independent major. Faculty that currently participate in the areas of emphasis will shift to the major.

The six new courses (totaling 14 credit hours) proposed for the Neuroscience major will be taught by two new faculty members, as detailed below, and by existing faculty whose classes will be phased out as part of curriculum revisions to better align with current student demand and educational needs.

b. If this program is approved, what will be the new teaching load and distribution of time for the current faculty members? How will existing staff be impacted?

The teaching load and distribution of time for current faculty members in the areas of emphasis are expected to remain the same as they transition to the major. All but six of the major courses are currently offered and taught by existing faculty. The six new courses totaling 14 credit hours will be taught by two new faculty members and by faculty with classes that will be terminated as part of curriculum revisions to align current student demand and educational needs.

We do expect an impact on existing staff, particularly those responsible for advising. To effectively manage the increased workload and ensure that students receive the necessary support and guidance, we request the hiring of an Undergraduate Coordinator Assistant for the Neuroscience major.

c. List the faculty that will be redirected from their current teaching load assignments to support this new program

The Departments of Psychology and Cellular Biology have been authorized to recruit new faculty in the area of neuroscience as part of the President's Hiring Initiative. Each Department is recruiting one faculty member. These two new faculty will teach courses in the new major and will help to maintain the targeted student to faculty ratio of 17:1 as part of UGA's Strategic Enrollment Management Plan.

d. Explain who will be teaching the existing courses that are being released so faculty can teach a new program course. Additionally, please discuss the fiscal implications associated with course releases and redirections of faculty.

No course releases are needed. All except for six of the major courses are currently offered and taught by existing faculty. The six new courses (totaling 13 credit hours) proposed as part of the

Neuroscience major will be taught by a combination of existing faculty and two new faculty hires. Teaching assignments will be based on faculty expertise and student demand.

e. What costs are included in your budget for course development? (Consider professional development, course development time buy out, overload pay, and re-training).

No professional development, course development time buy out, overload pay, or re-training costs are associated with the development of the new courses proposed as part of the major.

- f. Attach your SACSCOC roster for the proposed program. Include in parentheses the individual with administrative responsibility for the program and whether listed positions are projected new hires and/or currently vacant.
- 52. Explain your plan for <u>new</u> faculty and staff for the program:

The Departments of Psychology and Cellular Biology have both been authorized to recruit new faculty in the area of neuroscience as part of the President's Hiring Initiative. Each department is recruiting one faculty member. These two new faculty will teach courses in the new major and will help to maintain the targeted student to faculty ratio of 17:1 as part of UGA's Strategic Enrollment Management Plan.

53. How many new staff will be needed for this program over the next four years?

#### Enter # 1

a. Discuss why new or additional staff resources are needed. Consider staff needs, support services
 (i.e. advisement, faculty support, etc.)

As this program is overseen by two departments, it will be managed by a curriculum committee composed of faculty from the Departments of Psychology and Cellular Biology An Undergraduate Coordinator Assistant will be hired to ensure efficient coordination and management of the program between the two departments including student advisement.

#### **F3.** Facilities – complete the questions below

- 54. Where will the program be offered?^ Mark all that apply
  - $\boxtimes$  Main campus
  - □ Satellite campus: Specify Here
  - □ Other: Specify Here
  - □ 100% Online

If the program is 100% online and will use only existing faculty, remaining facilities questions can be skipped.

55. Complete the table below. Specify if these spaces are existing or new in the table below.^ If new, provide the semester and year of completion.

Space	New Space (ASF)	Use Existing Space (as is) (ASF)	Use Existing Space (Renovated) (ASF)	Semester/ Year of Occupancy
Dry Labs (STEM related)		X		
Wet Labs (STEM		X		
related)				
Dedicated Offices		X		
Fine Arts Spaces <sup>1</sup>				
Classrooms		Х		
Meeting Rooms		Х		
Student Study Space		Х		
Other (Specify)		/		

<sup>1</sup>Fine arts spaces can include theatres, recital halls, visual arts studios, performing arts centers, recording studios, design labs, and other performance venues.

56. If the anticipated program includes labs or "other" specialized spaces, please describe specific requirements for these rooms, including equipment.

The laboratory spaces already used by the Department of Cellular Biology will be utilized for this program as well. Ideally, the existing and proposed anatomy and physiology labs would be taught in laboratory space appropriate for handling cadavers.

57. What building(s) will be used to accommodate these programs? Please indicate specific building areas or room numbers where possible. If new construction, leasing, or land acquisition is required, please describe those plans.

The proposed Neuroscience major will use the same facilities as those of the existing neuroscience emphasis. Courses associated with the neuroscience area of emphasis are currently taught in the following buildings: Biological Sciences; newly renovated space in the old Chemistry Building; Psychology; Life Sciences; the Science Learning Center; and the Paul D. Coverdell Center.

58. What is the anticipated cost of facilities investments necessary during the first 4 years of the program? What is the planned funding source for initial facilities needs?

There is no anticipated cost of facilities investments; the program will use the same facilities as those of the existing neuroscience emphasis.

# F4. Technology

59. Identify any major equipment or technology integral to program start-up and operations. List any equipment or assets over \$5,000 (cumulative per asset) needed to start-up and run the program (insert rows as needed)

Technology and Equipment	Start-up Costs	On-going Costs	Est. Start Date of Operations/Use
Amplifiers and Headstages x 5	15,000		Fall 2025
96 Terabyte Data Storage RAID	8,000		Spring 2026
Neural mage data acquisition and analysis		20,000	Spring 2026
Total Technology Costs	23,000	20,000	

The proposed new lab courses will provide students real-world, practical experience with the sophisticated instrumentation used in careers that span various fields in healthcare, research, and industry.

# G. RISKS AND ASSUMPTIONS

60. In the table below, list any risks to the program's implementation over the next four years. For each risk, identify the severity (low, medium, high), probability of occurrence (low, medium, high), and the institution's mitigation strategy for each risk. Insert additional rows as needed. (e.g. Are faculty available for the cost and time frame).

Risk	Severity	Probability	Risk Mitigation Strategy
Low enrollment	high	low	Targeted marketing campaigns to attract students
Reputation	moderate	low	Stakeholder Engagement: Involve faculty, industry experts, and potential employers in the development of the curriculum to ensure it meets academic and industry standards
Accreditation and Compliance	high	low	Regular program audits and reviews
Operational challenges	moderate	low	Continuous Evaluation and Feedback: Implement a system for continuous evaluation and feedback from students, faculty, and staff

61. List any assumptions being made for this program to launch and be successful (e.g. SACSCOC accreditation request is approved, etc.).

It is assumed that the proposed major in Neuroscience meets the accreditation standards set by the Southern Association of Colleges and Schools Commission in coordination with the U.S. Department of Education. Since it has been offered as an area of emphasis for nearly a decade, the program has been reviewed and evaluated in the context of Academic Program Reviews for the majors under which it is currently offered.

# H. INSTITUTION APPROVAL

Have you completed and submitted the signature page? Yes

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