

New Academic Program Workflow Form

General

Proposed Name: Neuroscience minor

Transaction Nbr: 00000000000106

Plan Type: Minor

Academic Career: Undergraduate

Degree Offered:

Do you want to offer a minor? N

Anticipated 1st Admission Term: Sprg 2022

Details

Department(s):

SCNC

DEPTMNT ID	DEPARTMENT NAME	HOST
2529	Department of Neuroscience	Y

Campus(es):

MAIN

LOCATION	DESCRIPTION
TUCSON	Tucson

Admission application terms for this plan: Spring: Y Summer: Y Fall: Y

Plan admission types:

Freshman: Y Transfer: Y Readmit: Y Graduate: N

Non Degree Certificate (UCRT only): N

Other (For Community Campus specifics): N

Plan Taxonomy: 30.2401, Neuroscience

Program Length Type: Program Length Value: 0.00

Report as NSC Program:

SULA Special Program:

Print Option:

Diploma: Y Minor in Neuroscience

Transcript: Y Minor in Neuroscience

Conditions for Admission/Declaration for this Major:

N/A

Requirements for Accreditation:

N/A

Program Comparisons

University Appropriateness

The neuroscience minor is designed to allow students in other majors an opportunity to explore the interdisciplinary field of neuroscience in a structured and rigorous way, while pursuing a major field of study in another discipline at the same time.

Nonscience majors wishing to minor in neuroscience should be aware that preparation courses in chemistry, life sciences, and physics are prerequisites to the upper-division course requirements.

We are including two sources of evidence demonstrating demand, interest and need for a neuroscience minor in the southwest which currently is non-existent: 1) Burning Glass market analysis in neuroscience and 2) neuroscience minor programs are available at other universities, including:

- ¿ University of California, Los Angeles (UCLA)
- ¿ Texas A&M University (TAMU)
- ¿ Penn State
- ¿ Ohio State University (OSU)
- ¿ University of California, Davis (UC Davis)
- ¿ University of Minnesota
- ¿ University of North Carolina

When identifying the above neuroscience minors¿ academic offerings, there is a lack of offering in the Utah, Arizona and New Mexico. In addition to a geographical need, the market analysis data shows a projected increase in employment for students with this minor nationally and in Arizona.

Arizona University System

NBR	PROGRAM	DEGREE	#STDNTS	LOCATION	ACCRDT
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Peer Comparison

Please see files

Faculty & Resources

Faculty

Current Faculty:

INSTR ID	NAME	DEPT	RANK	DEGREE	FCLTY/%
02571748	Marina Cholanian	2529	Lecturer	Doctor of Philosophy	.50
09700864	Alan Nighorn	2529	Professor	Doctor of Philosophy	.25

Additional Faculty:

We have 11 Faculty members in the Department of Neuroscience. In addition, the minor courses are existing in other departments and thus we are only adding seats to those courses.

Current Student & Faculty FTE

DEPARTMENT	UGRD HEAD COUNT	GRAD HEAD COUNT	FACULTY FTE
2529	600	0	.75

Projected Student & Faculty FTE

	UGRD HEAD COUNT			GRAD HEAD COUNT			FACULTY FTE		
DEPT	YR 1	YR 2	YR 3	YR 1	YR 2	YR 3	YR 1	YR 2	YR 3
2529	36	39	44	0	0	0	.75	.75	.75

Library

Acquisitions Needed:

N/A

Physical Facilities & Equipment

Existing Physical Facilities:

We are using existing classrooms and lab space.

Additional Facilities Required & Anticipated:

N/A

Other Support

Other Support Currently Available:

N/A

Other Support Needed over the Next Three Years:

N/A

Comments During Approval Process

6/29/2021 1:43 PM

NIGHORN

Comments

I assume I'm approving this as an instructor.

7/4/2021 1:29 PM

RGOMEZ

Comments

Approved.



New Academic Program - Standalone Undergraduate Minor CURRICULAR INFORMATION

- I. **MINOR DESCRIPTION:** Provide a marketing/promotional description for the proposed program (recommend working with your college marketing team). The description will be displayed on the advisement report(s), Degree Search, and should match departmental and college websites, handouts, promotional materials, etc.

The minor in neuroscience is designed for students desiring a broad knowledge about the basic and functional aspects of the nervous system. Neuroscience is a scientific discipline that investigates the organization, development, and function of the nervous system, and its relationship to behavior, cognition, and neurological or neuropsychiatric disorders. The minor is designed to give students the capacity to think critically and creatively about complex problems of contemporary neuroscience. In addition, students will develop their skills to properly communicate and discuss complex concepts of neuroscience and findings of neuroscience research to professionals and the public. The goal is to provide students with a fundamental understanding of the principles of neuroscience preparing them for graduate or professional schools. Students complementing their major with the neuroscience minor will be competitive for positions in the pharmaceutical industry, a variety of health-related industries, in middle school, high school and adult education, and in disciplines that increasingly require understanding of biology and biotechnology, including law, policymaking and business.

- II. **JUSTIFICATION/NEED FOR THE MINOR:** Describe the purpose and need for the proposed minor, providing market analysis data or other tangible evidence of the need/interest in the program. This might include results from surveys of current students, alumni, and/or employers or reference to student enrollments in similar programs in the state or region. Curricular Affairs can provide a job posting/demand report by skills obtained/outcomes of the proposed minor, upon request.

The neuroscience minor is designed to allow students in other majors an opportunity to explore the interdisciplinary field of neuroscience in a structured and rigorous way, while pursuing a major field of study in another discipline at the same time.

Non-science majors wishing to minor in neuroscience should be aware that preparation courses in chemistry, life sciences, and physics are prerequisites to the upper-division course requirements.

We are including two sources of evidence demonstrating demand, interest and need for a neuroscience minor in the southwest which currently is non-existent: 1) Burning Glass market analysis in neuroscience and 2) neuroscience minor programs are available at other universities, including:

- University of California, Los Angeles (UCLA)
- Texas A&M University (TAMU)
- Penn State
- Ohio State University (OSU)
- University of California, Davis (UC Davis)
- University of Minnesota
- University of North Carolina

When identifying the above neuroscience minors' academic offerings, there is a lack of offering in the Utah, Arizona and New Mexico. In addition to a geographical need, the market analysis data shows a projected increase in employment for students with this minor nationally and in Arizona.

The Burning Glass market analysis shows a great growth in employment in Arizona, predicting 30,791 jobs in year 2028. In nearly one third of those positions, a bachelor's degree is expected. However, a minor fills a niche that is currently not provided in the southwest and will provide training for numerous technical job opportunities (listed below) that were identified in the market analyses. The largest area of projected growth is in research. The proposed minor course curriculum will produce competitive applicants for several types of these research-related positions.

Neuroscience CIP (Classification of Instructional Programs) (26.1501)
<https://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=87810>

Career Outcomes mapped to Neuroscience: Laboratory Technician, Medical Scientist, Biological Technician, Researcher / Research Associate, Laboratory Technologist, Laboratory Manager, Clinical Research Coordinator / Manager, Biologist.

How Many Jobs are there for Graduates of the minor?

For our proposed minor, there were 4,057 job postings in the last 12 months.

Compared to:

- 1,019,379 total job postings in your selected location
- 291,026 total job postings requesting a Bachelor's and minor degree in Arizona.

Growth by Geography

Geography	Selected Occupations	Total Labour Market	Relative Growth
Arizona	38.14 %	11.87 %	High
Nationwide	-12.14 %	4.24 %	Low



Figure from market analyses: Employment data for graduates of the neuroscience minor in Arizona between years 2014 to 2019, and projection for 2028. The projection for 2028 indicates a high growth rate of jobs by 38.14%.

III. **MINOR REQUIREMENTS:** Complete the table below. All University of Arizona minors require at least 18 units. Note: information in this section must be consistent throughout the proposal documents and will be used to build the Academic Advisement Report (ADVIP). Please include letters of support for any courses not offered by the proposing department (see Workflow Input form).

Minimum total units required	18
Minimum upper-division units required	9
Total transfer units that may apply to minor	9
List any special requirements to declare/admission to this minor (completion of specific coursework, minimum GPA, interview, application, etc.)	Meet with Neuroscience department advisor and program coordinator
Minor requirements. List	Required core: Complete 2 courses (6 units)

<p>all required minor requirements including core and electives. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.</p>	<p>NSCS 307 (3-4) Cellular Neurophysiology</p> <p>NROS 310 (3-4) Molecular and Cellular Biology of Neurons</p> <p>Electives: Complete 12 units from the selection below. A minimum of 6 units must be from NROS or NSCS courses. Limit of 6 units from house-numbered coursework may be used towards this requirement.</p> <p>NSCS 200 (3) Fundamentals of Neuroscience and Cognitive Science</p> <p>NSCS 308 (1) Methods in Neuroscience</p> <p>NSCS 311 (3) Scientific Programming with MatLab</p> <p>PSY 313 (3) Drugs and the Brain</p> <p>PSY 321 (3) Brain Rehabilitation</p> <p>NROS 330 (3) Principles of Neuroanatomy: Cells to Systems</p> <p>NSCS 344 (3) Modeling the Mind</p> <p>ECOL 346 (3) Bioinformatics</p> <p>NROS 381 (3) Animal Brains, Signals, Sex, and Social Behaviors</p> <p>PSY 403C (3) Introduction to Computational Neuroscience</p> <p>PSY 405 (3) Developmental Cognitive Neuroscience</p> <p>NROS 412 (3) Molecular Mechanisms of Learning and Memory</p> <p>NROS 418 (3) Fundamental Principles of Systems Neuroscience</p> <p>NROS 430 (3) Neurogenetics</p> <p>PHYS 431 (3) Molecular Biophysics</p>
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	<p>NSCS 440 (3) How to Build a Brain: Mechanisms of Neural Development</p> <p>ISTA 457 (3) Neural Networks</p> <p>PSIO 465 (3) Neurophysiology</p> <p>PSY 485 (3) Psychoneuroimmunology</p> <p>ECOL 487R (3) Animal Behavior</p> <p>ECOL 487L (1) Animal Behavior Lab</p> <p>PSY 496L (3) Introduction to Neural Data Analysis</p>
Internship, practicum, applied course requirements (Yes/No). If yes, provide description.	No
Additional requirements (provide description)	N/A
Any double-dipping restrictions (Yes/No)? If yes, provide description.	Yes, minor coursework may not double dip with another minor. A minimum of 6 units must be unique to the minor and cannot be used toward other requirements.

IV. NEW COURSES NEEDED: If new courses are required for the proposed program, [UA Course Add forms](#) must be submitted before/simultaneously with this proposal. List all course additions in progress in the table below. Add rows as needed.

The proposal for a neuroscience minor does not require new courses.

Course prefix and number (include cross-listings)	Units	Title	Pre-requisites	Modes of delivery (online, in-person, hybrid)	Course Fee? (Y/N) More info here.	Course Form transaction number	Anticipated first term offered	Use in the program (required/elective)
N/A								

Subject description for new prefix (if requested). Include your requested/preferred prefix, if any:

V. REQUIRED SIGNATURES

Program Director/Main Proposer (print name and title):

Ulises Ricoy, Faculty Director NSCS

Program Director/Main Proposer signature:

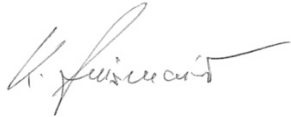


Date: August 25th 2021 / ---

Department Head (print name and title):

Konrad E. Zinsmaier

Department Head's signature:



Date: August 27th, 2021

Associate/Assistant Dean (print name):

Rebecca L. Gomez

Associate/Assistant Dean's signature:



Date: 8/30/21

Dean (print name):

Dean's signature:

Date:

For use by Curricular Affairs:

Committee	Approval date
APS	
Undergraduate Council	
Undergraduate College Academic Administrators Council	
Faculty Senate	

BUDGET PROJECTION FORM
Name of Proposed Program or Unit: Minor in Neuroscience

Budget Contact Person:	Projected		
	1st Year 2021 - 2022	2nd Year 2022 - 2023	3rd Year 2023 - 2024
METRICS			
Net increase in annual college enrollment UG	-	-	-
Net increase in college SCH UG	108	237	252
Net increase in annual college enrollment Grad	-	-	-
Net increase in college SCH Grad	-	-	-
Number of enrollments being charged a Program Fee	-	-	-
New Sponsored Activity (MTDC)	-	-	-
Number of Faculty FTE	-	-	-
FUNDING SOURCES			
<u>Continuing Sources</u>			
UG RCM Revenue (net of cost allocation)	15,464	33,586	35,692
Grad RCM Revenue (net of cost allocation)	-	-	-
Program Fee RCM Revenue (net of cost allocation)	-	-	-
F and A Revenues (net of cost allocations)	-	-	-
UA Online Revenues	-	-	-
Distance Learning Revenues	-	-	-
Reallocation from existing College funds (attach description)	-	-	-
Other Items (attach description)	-	-	-
Total Continuing	\$ 15,464	\$ 33,586	\$ 35,692
<u>One-time Sources</u>			
College fund balances	-	-	-
Institutional Strategic Investment	-	-	-
Gift Funding	-	-	-
Other Items (attach description)	-	-	-
Total One-time	\$ -	\$ -	\$ -
TOTAL SOURCES	\$ 15,464	\$ 33,586	\$ 35,692
EXPENDITURE ITEMS			
<u>Continuing Expenditures</u>			
Faculty	-	-	-
Other Personnel	-	-	-
Employee Related Expense	-	-	-
Graduate Assistantships	-	-	-
Other Graduate Aid	-	-	-
Operations (materials, supplies, phones, etc.)	1,000	1,000	1,000
Additional Space Cost	-	-	-
Other Items (attach description)	-	-	-
Total Continuing	\$ 1,000	\$ 1,000	\$ 1,000
<u>One-time Expenditures</u>			
Construction or Renovation	-	-	-
Start-up Equipment	-	-	-
Replace Equipment	-	-	-
Library Resources	-	-	-
Other Items (attach description)	-	-	-
Total One-time	\$ -	\$ -	\$ -
TOTAL EXPENDITURES	\$ 1,000	\$ 1,000	\$ 1,000
Net Projected Fiscal Effect	\$ 14,464	\$ 32,586	\$ 34,692

Projected SCH

	1st Year	2nd Year	3rd Year
	2021 - 2022	2022 - 2023	2023 - 2024
Fall 2021 LD minors	20	16	
Cohort UD minors	16	20	36
Fall 2022 LD minors		20	19
Cohort UD minors		19	20
Fall 2023 LD minors			24
Cohort UD minors			20
SCH	108	237	252
	\$15,463.68	\$33,586.43	\$35,692.27

18 units required
minimum 9 units upper-division

	year 1	year 2	year 3	year 4	
LD Minor	3				3
UD Minor	3	6	3	3	15
					18

	FY22	FY23	FY24
Gross SCH	\$219	\$219	\$220
Tax	34.62%	35.29%	35.62%
Net SCH	\$143	\$142	\$142

5-YEAR PROJECTED ANNUAL ENROLLMENT					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Number of Students	29-43 (Median 36)	39	44	45	46



New Academic Program
PEER COMPARISON

Select three peers (if possible/applicable) for completing the comparison chart from [ABOR-approved institutions](#), [AAU members](#), and/or other relevant institutions recognized in the field. The comparison programs are not required to have the same degree type and/or title as the proposed UA program. Information for the proposed UA program must be consistent throughout the proposal documents.

Program name, degree, and institution	Minor in Neuroscience, UA	Peer 1: Interdisciplinary Neuroscience Minor, Ohio State University	Peer 2: Minor in Neuroscience, Texas A&M	Peer 3: Minor in Neuroscience, UCLA
Current number of students enrolled		174	300	27
Program Description	<p>The minor in neuroscience is designed for students desiring a broad knowledge about the basic and functional aspects of the nervous system. Neuroscience investigates the organization, development, and function of the nervous system, and its behavior, cognition, and disorders. The minor is designed to give students the capacity to think critically and creatively about complex problems of contemporary neuroscience. In addition, students will develop their skills to properly communicate and discuss complex concepts of neuroscience and findings of neuroscience research to</p>	<p>From: https://neurosciencemajor.osu.edu/curriculum/minor</p> <p>Neuroscience is a scientific discipline that investigates the organization, development, and function of the nervous system, and its relationship to behavior, cognition, and neurological or neuropsychiatric disorders. The minor consists of 5 classes (15 minimum credit hours) designed to give students a strong foundational and broad exposure to the neuroscience</p>	<p>From: https://tamin.tamu.edu/undergraduate/minor/</p> <p>The Neuroscience Minor, offered by the Texas A&M Institute for Neuroscience (TAMIN), is considered an interdisciplinary minor with course selections in the Departments of Biology, Psychology, Philosophy and Veterinary Integrative Biosciences. Please be aware that each course selection below may have prerequisite requirements that must be met. The coursework (15 credits) listed represents various</p>	<p>From: https://www.neurosci.ucla.edu/program/minor-requirements/</p> <p>The Neuroscience minor is designed to allow students in other majors an opportunity to explore the interdisciplinary field of neuroscience in a structured and rigorous way, while pursuing a major field of study in another discipline at the same time. Non-science majors wishing to minor in Neuroscience should be aware that preparation courses in chemistry, life sciences,</p>

	professionals and the public. The goal is to provide students with a fundamental understanding of the principles of neuroscience preparing them for graduate or professional schools. Students complementing their major with the neuroscience minor will be competitive for positions in the pharmaceutical industry, a variety of health-related industries, in middle school, high school and adult education, and in disciplines that increasingly require understanding of biology and biotechnology, including law, policy-making and business.	area. Students must complete two Core Requirement courses and the remaining three courses are taken from the courses listed in the Elective Requirement section. This course work should be chosen in consultation with a neuroscience academic advisor.	sub-disciplines within the field of Neuroscience and would give the student an overall knowledge base fitting a minor in Neuroscience.	and physics are requisites to the upper-division course requirements. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor's requirements. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Target Careers	Research -Biotech -Medicine -Healthcare	Research -Biotech -Medicine -Healthcare	Research -Biotech -Medicine -Healthcare	Research -Biotech -Medicine -Healthcare
Minimum # of units required	18	15	15	15
Special requirements to declare/gain admission? (i.e. pre-requisites, GPA, application, etc.)	Meet with Neuroscience department advisor and program coordinator	Meet with an advisor in the Neuroscience Undergraduate Program	Complete a Neuroscience Minor Approval Form, signed by the TAMIN academic advisor and then submitted to the major advisor. The minor must be declared before the	To enter the minor, students must have an overall grade-point average of 2.0 or better and a 2.5 GPA in the requisite courses for Neuroscience M101A and M101B.

			student has completed 95 hours.	
Internship, practicum, or applied/experiential requirements? If yes, describe.	No	No	No	No

Additional questions:

1. How does the proposed program align with peer programs? Briefly summarize the similarities between the proposed program and peers, which could include curriculum, overall themes, faculty expertise, intended audience, etc. **The Neuroscience minor at UA is like the minors in our peer institutions by offering rigorous coursework to similar undergraduate audiences. For example, the minimum number of credit hours range from 15-18 in all institutions. Further, the upper division coursework electives have similar math and science pre-requirements. MATH 122A&B – First Semester Calculus (5) or MATH 125 – Calculus I (3) Statistics (choose one – MATH 263 recommended for pre-health students) MATH 263 – Introduction to Statistics and Biostatistics (3) or PSY 230 – Psychological Measurement and Statistics (3) NSCS 200, MCB 181R/L, CHEM 151.**
2. How does the proposed program stand out or differ from peer programs? Briefly summarize the differences between the proposed program and peers, which could include curriculum, overall themes, faculty expertise, intended audience, etc. **The UA Neuroscience minor stands out due to the multidisciplinary and integrative approaches of our faculty employing diverse species, a trait that sets us apart from many other Neuroscience departments.**
3. How do these differences make this program more applicable to the target student population and/or a better fit for the University of Arizona? **The unique approach of our faculty allows the recruitment of a wider audience at the UA attracting students from several programs such as physiology, molecular and cellular biology, ecology and evolutionary biology, entomology, agricultural sciences, computer science, engineering.**

From: [Ryan, Lee - \(ryant\)](#)
To: [Zinsmaier, Konrad E - \(kez4\)](#)
Cc: [Van Sickler, Becca - \(beccav\)](#)
Subject: RE: Requesting permission to use PSY courses for neuroscience minor
Date: Wednesday, February 10, 2021 11:56:53 AM

Those look good to me, Konrad. Looks like a strong application.

Cheers,
LR

Lee Ryan, Ph.D.
Professor and Head
PSYCHOLOGY DEPARTMENT
UNIVERSITY OF ARIZONA
<https://psychology.arizona.edu>

From: Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu>
Sent: Wednesday, February 10, 2021 12:47 PM
To: Ryan, Lee - (ryant) <ryant@arizona.edu>
Cc: Van Sickler, Becca - (beccav) <beccav@arizona.edu>
Subject: Requesting permission to use PSY courses for neuroscience minor

Hi Lee,

as I told you earlier, the Department of Neuroscience is working on offering a minor in Neuroscience. The minor will consist of 18 minimum credit hours designed to give students a strong foundational and broad exposure to the organization, development, and function of the nervous system in health and disease. I have attached an overview of the course program.

To move forward with our plan, I am asking whether it will be possible to list the courses PSY 313, 321, 403C, 405, 485, 496L as electives for the neuroscience minor?

Please let me know if you have any questions.

Best,

Konrad

Konrad E. Zinsmaier, Ph.D.
Professor of Neuroscience and Molecular & Cellular Biology
Interim Head, Dept of Neuroscience
Chair, GIDP in Neuroscience
University of Arizona
Department of Neuroscience

Gould-Simpson Building 627
P.O. Box 210077
1040 E. 4th Street
Tucson, AZ 85721-0077

From: [Zinsmaier, Konrad E - \(kez4\)](#)
To: [Ricoy, Ulises - \(ricoy\)](#); [Van Sickler, Becca - \(beccav\)](#)
Subject: Fwd: Neuroscience Minor
Date: Tuesday, March 2, 2021 12:44:54 PM

Begin forwarded message:

From: "Delamere, Nicholas A - (delamere)" <delamere@arizona.edu>
Subject: Neuroscience Minor
Date: March 2, 2021 at 12:56:19 PM MST
To: "Zinsmaier, Konrad E - (kez4)" <kez4@arizona.edu>

Dear Konrad,

The department of Physiology approves listing the course PSIO 465-Neurophysiology as an elective in the Neuroscience Minor. PSIO 465 will be useful for PSIO majors who are doing the Neuroscience Minor. As you know, the need to keep class size manageable means PSIO 465 is not open to non-PSIO majors.

My apologies for taking so long to respond to your query. With best wishes ...

Nick D

Nick Delamere Ph.D.
Head, Department of Physiology
University of Arizona
PO Box 245051
Tucson, AZ 85724-5051

(520) 626 6425

From: [Zinsmaier, Konrad E - \(kez4\)](#)
To: [Van Sickler, Becca - \(beccav\)](#)
Subject: Fwd: [EXT]Re: Requesting permission to use PHYS 431 course for neuroscience minor
Date: Wednesday, February 24, 2021 2:39:57 PM

FYI

Begin forwarded message:

From: Sumit Mazumdar <smtmazumdar28@gmail.com>
Subject: [EXT]Re: Requesting permission to use PHYS 431 course for neuroscience minor
Date: February 10, 2021 at 2:52:11 PM MST
To: "Zinsmaier, Konrad E - (kez4)" <kez4@arizona.edu>

External Email

Hi Konrad:

I think it is great if PHYS 431 is used as a course for the neuroscience minor. I am all for it.

Sumit

Sumit Mazumdar
Professor and Head
Department of Physics

On Wed, Feb 10, 2021 at 12:35 PM Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu> wrote:

Dear Dr. Mazumdar,

the Department of Neuroscience is working on offering a minor in Neuroscience. The minor will consist of 18 minimum credit hours designed to give students a strong foundational and broad exposure to the organization, development, and function of the nervous system in health and disease. I have attached an overview of the course program.

To move forward with our plan, I am asking whether it will be possible to list the courses PHYS 431 of your program as elective for the neuroscience minor?

Please let me know if you have any questions.

Best,

Konrad

Konrad E. Zinsmaier, Ph.D.
Professor of Neuroscience and Molecular & Cellular Biology
Interim Head, Dept of Neuroscience
Chair, GIDP in Neuroscience
University of Arizona
Department of Neuroscience
Gould-Simpson Building 627
P.O. Box 210077
1040 E. 4th Street
Tucson, AZ 85721-0077

From: [Van Sickler, Becca - \(beccav\)](#)
To: [Andrews-Hanna, Jessica - \(jandrewshanna\)](#); [Miller, Julie Elizabeth - \(juliemiller\)](#); [Peterson, Mary A - \(mapeters\)](#); [Ricoy, Ulises - \(ricoy\)](#); [Zinsmaier, Konrad E - \(kez4\)](#)
Cc: [Mary Peterson](#)
Subject: RE: Requesting permission to use NSCS courses for neuroscience minor
Date: Thursday, February 25, 2021 8:33:00 AM
Attachments: [image001.png](#)

Thank you, everyone. I also support the inclusion of the requested NSCS courses in the list of electives for the Neuroscience minor. And with that, I think we are all set!

Best,
Becca



Becca Van Sickler

Program Coordinator, Senior
Neuroscience & Cognitive Science
THE UNIVERSITY OF ARIZONA

Gould-Simpson, 624
PO Box 210077 | Tucson, AZ 85721
Office: 520-621-6643
beccav@arizona.edu
Zoom: <https://arizona.zoom.us/my/beccav>
Pronouns: She / Her / Hers
www.nscs.arizona.edu
[facebook](#) | [twitter](#) | [instagram](#)

From: Andrews-Hanna, Jessica - (jandrewshanna) <jandrewshanna@arizona.edu>
Sent: Wednesday, February 24, 2021 7:44 PM
To: Miller, Julie Elizabeth - (juliemiller) <juliemiller@arizona.edu>; Peterson, Mary A - (mapeters) <mapeters@arizona.edu>; Ricoy, Ulises - (ricoy) <ricoy@arizona.edu>; Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu>
Cc: Mary Peterson <mapeters@u.arizona.edu>; Van Sickler, Becca - (beccav) <beccav@arizona.edu>
Subject: Re: Requesting permission to use NSCS courses for neuroscience minor

I also support the minor in neuroscience
All the best,
Jessica

Jessica Andrews-Hanna, PhD
Assistant Professor, Department of Psychology; Cognitive Science Program
Director, Neuroscience of Emotion & Thought (NET) Lab
University of Arizona (Tohono O'odham & Pascua Yaqui Lands)

Pronouns: she, her, hers

From: Miller, Julie Elizabeth - (juliemiller) <juliemiller@arizona.edu>
Sent: Wednesday, February 24, 2021 8:03 PM
To: Peterson, Mary A - (mapeters) <mapeters@arizona.edu>; Ricoy, Ulises - (ricoy) <ricoy@arizona.edu>; Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu>
Cc: Mary Peterson <mapeters@u.arizona.edu>; Van Sickler, Becca - (beccav) <beccav@arizona.edu>; Andrews-Hanna, Jessica - (jandrewshanna) <jandrewshanna@arizona.edu>
Subject: Re: Requesting permission to use NSCS courses for neuroscience minor

I, too, as a member of the NSCS steering committee, support the minor in Neuroscience.

Julie

Julie E. Miller, Ph.D, Assistant Professor
Shared, Depts. of Neuroscience and Speech, Language and Hearing Sciences
Joint Appointment-Neurology
Member, Bio5
School of Mind, Brain & Behavior
Member, Bio5 Institute
Mailing Address: Dept. of Neuroscience, University of Arizona
1040 E. 4th St., 611/PO Box 210077-0077
Tucson, AZ 85721
Work: (520) 626-0100
E-mail: juliemiller@email.arizona.edu
<http://juliemiller.lab.arizona.edu>

From: Peterson, Mary A - (mapeters) <mapeters@arizona.edu>
Sent: Wednesday, February 24, 2021 4:54 PM
To: Ricoy, Ulises - (ricoy) <ricoy@arizona.edu>; Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu>
Cc: Mary Peterson <mapeters@u.arizona.edu>; Miller, Julie Elizabeth - (juliemiller) <juliemiller@arizona.edu>; Van Sickler, Becca - (beccav) <beccav@arizona.edu>; Andrews-Hanna, Jessica - (jandrewshanna) <jandrewshanna@arizona.edu>
Subject: Re: Requesting permission to use NSCS courses for neuroscience minor

As a member of the NSCS Steering committee, I approve the inclusion of some of the NSCS courses in the proposed Neuroscience minor.

Mary A. Peterson

Professor and Director, Cognitive Science Program
Professor, Department of Psychology
Professor, Evelyn F. McKnight Brain Institute

Chair, Cognitive Science Graduate Interdisciplinary Program
<https://petersonlab.wixsite.com/visualperceptionlab>

Pronouns: She, her, hers

Mailing Address:
Department of Psychology
1503 E. University Blvd.
University of Arizona
Tucson, AZ 85721

Phone: 520-621-5365

FAX: 520-621-9306

From: Ricoy, Ulises - (ricoy) <ricoy@arizona.edu>
Sent: Wednesday, February 24, 2021 3:34 PM
To: Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu>
Cc: Mary Peterson <mapeters@u.arizona.edu>; Miller, Julie Elizabeth - (juliemiller) <juliemiller@arizona.edu>; Van Sickler, Becca - (beccav) <beccav@arizona.edu>; Andrews-Hanna, Jessica - (jandrewshanna) <jandrewshanna@arizona.edu>
Subject: Re: Requesting permission to use NSCS courses for neuroscience minor

Hi Konrad,

I support the minor in Neuroscience. Also, from the conversation today during the NSCS steering committee, everyone is on board as well. I will let them individually reply to this email thread so that all the emails can be included as part of the application.

Thanks, Ulises

Ulises Ricoy, PhD
Associate Research Scientist
Department of Neuroscience
Faculty Director, Undergraduate Program
In Neuroscience and Cognitive Science
University of Arizona
<http://nscs.arizona.edu/>
The Grass Foundation Director of Outreach Initiatives
<https://grassfoundation.org/>
Pronouns: He/His/Him

From: "Zinsmaier, Konrad E - (kez4)" <kez4@arizona.edu>
Date: Wednesday, February 24, 2021 at 3:25 PM
To: "Ricoy, Ulises - (ricoy)" <ricoy@arizona.edu>

Cc: Mary Peterson <mapeters@u.arizona.edu>, "Miller, Julie Elizabeth - (juliemiller)" <juliemiller@arizona.edu>, "Van Sickler, Becca - (beccav)" <beccav@arizona.edu>, "Andrews-Hanna, Jessica - (jandrewshanna)" <jandrewshanna@arizona.edu>

Subject: Requesting permission to use NSCS courses for neuroscience minor

Hi Ulises,

as you know, the Department of Neuroscience is working on offering a minor in Neuroscience. The minor will consist of 18 minimum credit hours designed to give students a strong foundational and broad exposure to the organization, development, and function of the nervous system in health and disease. I have attached an overview of the course program.

To move forward with our plan, I am asking whether it will be possible to list the courses NSCS 195A, 195B, 200, 307, 308, 311, 344, 440 for the neuroscience minor?

Please let me know if there are any questions.

Best,

Konrad

Konrad E. Zinsmaier, Ph.D.
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Interim-Head, Dept. of Neuroscience
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phone: 520-626-1343

[email: kez4@email.arizona.edu](mailto:kez4@email.arizona.edu)

<https://neurosci.arizona.edu/person/konrad-zinsmaier-phd>

From: [Brooks, Catherine F - \(cfbrooks\)](#)
To: [Zinsmaier, Konrad E - \(kez4\)](#)
Cc: [Van Sickler, Becca - \(beccav\)](#)
Subject: Re: Requesting permission to use ISTA courses for neuroscience minor
Date: Wednesday, February 24, 2021 6:18:25 PM

I am very happy to support this, and very sorry for my delay. I seem to be very behind on my email box.

Do you need a memo from me?

I am in full support. Catherine

From: Zinsmaier, Konrad E - (kez4) <kez4@arizona.edu>
Sent: Wednesday, February 10, 2021 12:05 PM
To: Brooks, Catherine F - (cfbrooks) <cfbrooks@arizona.edu>
Cc: Van Sickler, Becca - (beccav) <beccav@arizona.edu>
Subject: Requesting permission to use ISTA courses for neuroscience minor

Dear Dr. Brooks,

the Department of Neuroscience is working on offering a minor in Neuroscience. The minor will consist of 18 minimum credit hours designed to give students a strong foundational and broad exposure to the organization, development, and function of the nervous system in health and disease. I have attached an overview of the course program.

To move forward with our plan, I am asking whether it will be possible to list the course ISTA 457 of your program as elective for the neuroscience minor?

Please let me know if you have any questions.

Best,
Konrad

Konrad E. Zinsmaier, Ph.D.
Professor of Neuroscience and Molecular & Cellular Biology
Interim Head, Dept of Neuroscience
Chair, GIDP in Neuroscience
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P.O. Box 210077
1040 E. 4th Street
Tucson, AZ 85721-0077

From: [Worobey, Michael - \(worobey\)](#)
To: [Zinsmaier, Konrad E - \(kez4\)](#)
Cc: [Worobey, Michael - \(worobey\)](#); [Van Sickler, Becca - \(beccav\)](#); [Harrison, Lauren A - \(lashley\)](#)
Subject: Re: Requesting permission to use ECOL courses for neuroscience minor
Date: Wednesday, February 10, 2021 11:04:22 AM

Dear Konrad,

You bet: go for it.

Best,

Mike

On Feb 10, 2021, at 11:59 AM, Zinsmaier, Konrad E - (kez4)
<kez4@arizona.edu> wrote:

Dear Dr. Worobey,

the Department of Neuroscience is working on offering a minor in Neuroscience. The minor will consist of 18 minimum credit hours designed to give students a strong foundational and broad exposure to the organization, development, and function of the nervous system in health and disease. I have attached an overview of the course program.

To move forward with our plan, I am asking whether it will be possible to list the courses ECOL 346 and ECOL 487R/L of your program as electives for the neuroscience minor?

Please let me know if you have any questions.

Best,

Konrad

Konrad E. Zinsmaier, Ph.D.
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<Neuroscience Minor Draft.docx>