

1. General Information

1a. Submitted by the College of: MEDICINE

Date Submitted: 3/30/2016

1b. Department/Division: Physiology

1c. Contact Person

Name: Bradley Taylor

Email: brad.taylor@uky.edu

Phone: 323-1870

Responsible Faculty ID (if different from Contact)

Name: Bradley Taylor

Email: brad.taylor@uky.edu

Phone: 323-1870

1d. Requested Effective Date: Semester following approval

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: PGY 394

2c. Full Title: Independent Research in Neurobiology and Neuroscience

2d. Transcript Title: Independent Research in Neurobiology and Neuroscience

2e. Cross-listing:

2f. Meeting Patterns

OTHER: 3-5

OTHEREXPLAIN: 3-5 hours per week of independent laboratory work for each credit hour enrolled

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 1-3

2i. Is this course repeatable for additional credit? Yes

If Yes: Maximum number of credit hours: 12

If Yes: Will this course allow multiple registrations during the same semester? No

2j. Course Description for Bulletin: PGY 394 is designed to provide students with an intensive experience in laboratory or field research. Participants should take an active role in the design and execution of experiments and in the analysis and interpretation of data. They should be capable of "independent research" in the sense that they can conduct the experiments with little direct supervision. Students are expected to become familiar with related research in the current literature by regularly reading scientific journals. The student is expected to devote at least 3-5 hours per week for each credit hour enrolled to laboratory work, although often more time is necessary.

2k. Prerequisites, if any:

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No

If YES, enter the off campus address:

4. Frequency of Course Offering: Summer,

Will the course be offered every year?: Yes

If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: No

If No, explain: Students will be mentored in the laboratories of faculty within the Physiology department.

6. What enrollment (per section per semester) may reasonably be expected?: 2-3

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: Yes

Will it be of interest to a significant number of students outside the degree pgm?: No

If Yes, explain:

8. Check the category most applicable to this course: Traditional – Offered in Corresponding Departments at Universities Elsewhere,

If No, explain: Students will be mentored in the laboratories of faculty within the Physiology department.

9. Course Relationship to Program(s).

a. Is this course part of a proposed new program?: No

If YES, name the proposed new program:

b. Will this course be a new requirement for ANY program?: Yes

If YES, list affected programs: Neuroscience BS

10. Information to be Placed on Syllabus.

a. Is the course 400G or 500?: No

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: Yes

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1.How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2.How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3.How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4.Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5.How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6.How do course requirements ensure that students make appropriate use of learning resources?

7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8.How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9.Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10.Does the syllabus contain all the required components? NO

11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

Ett, Joanie M

From: Taylor, Bradley K
Sent: Sunday, December 11, 2016 8:52 PM
To: Smith, William T; Ett, Joanie M; Szczapinski, Bridget
Cc: Pendergast, Julie; Shake, Mary
Subject: RE: PGY 394

Hi Bill,
We would like to leave the hours at 3-5 per credit hour.

A brief justification would be: "Certain neurophysiology experiments (e.g. electrophysiology, behavioral pharmacology, complex behavioral observations) require more than 2, and up to 5, uninterrupted, extended hours"

Thanks,
Brad

Bradley K. Taylor, Professor
Department of Physiology
Spinal Cord and Brain Injury Research Center
University of Kentucky Medical Center
Office: 859-323-1870, Lab: (R Donahue) 859-323-8217
<http://physiology.med.uky.edu/users/bkta222>

From: Smith, William T
Sent: Friday, December 09, 2016 12:46 PM
To: Ett, Joanie M <joanie.ett-mims@uky.edu>; Szczapinski, Bridget <bridget.szczapinski@uky.edu>
Cc: Pendergast, Julie <julie.pendergast@uky.edu>; Taylor, Bradley K <brad.taylor@uky.edu>; Shake, Mary <mcshak1@uky.edu>
Subject: RE: PGY 394

Hello again Bridget,
The doc I sent you before listed the senate guidelines. Joanie Ett (from UGC) consulted with Sheila in the Senate Council office and here was the info she got:

I asked Sheila in the Senate Council office about the rules for lab hours. She pointed me toward SR 5.2.1 (attached), which says generally the lab hours will be 2 hours for 1 credit. However, she said it can be more than two hours if they have a good rationale for it. If the proposers come back and say they don't want to reduce the lab hours, you may just want to ask them to provide a rationale for requiring so many.

The guidelines I sent yesterday said 2-3 lab hours per credit hour. But, if you want 3-5, 5.2.1 says that's probably ok with the senate (which gets the prop after UGC review) so long as there's justification. Let me know how you want to proceed (changing all docs to "2-3 hours" or adding justification and leaving all docs at "3-5"). The next meeting is Tuesday so it would be great if you could tell me your preference before then.

Thanks - Bill

William T Smith, Associate Professor
Dept of Electrical and Computer Engineering
(859) 257-1009

From: Smith, William T
Sent: Thursday, December 8, 2016 12:23 PM
To: Ett, Joanie M <joanie.ett-mims@uky.edu>; Szczapinski, Bridget <bridget.szczapinski@uky.edu>
Cc: Pendergast, Julie <julie.pendergast@uky.edu>; Taylor, Bradley K <brad.taylor@uky.edu>; Shake, Mary <mcshak1@uky.edu>
Subject: RE: PGY 394

Hello Bridget,

I am the person tasked to present PGY 394 to the Undergraduate Council. The main reason the prop was tabled back in October was the inconsistency in the lab hour counts on the proposal form, the syllabus, and the research contract. This is what I said in an email to Bradley Taylor on 10/18:

I presented the PGY 394 proposal to the Undergraduate Council but we tabled the vote. See the items from my previous email below. Item 1 is a suggestion to comply with senate rules. Item 2 was the biggest issue. My suggestion is to change the syllabus and the course proposal form to reflect the research contract expectation (2-3 hours per credit hour). The disconnect across the three docs is why the prop was tabled.

“Item 1” had to do with a minor excused absence policy issue and that was corrected in the revised syllabus. For “Item 2”, the problem was that the prop form, syllabus, and research contract all had differing lab hour counts for each credit hour. The revised paperwork does have a consistent hour count across the three docs. However, the hour count is 3-5 lab hours per credit hour which exceeds the senate guidelines (see attached, page 1). Per my 10/18 email, my recommendation was to unify the hour count per the original research contract which was 2-3 lab hours per credit hour and complied with the senate policy.

I will ask to add PGY 394 to the agenda for next week’s UGC meeting. I would again suggest that the hour count across the docs be changed to line up with senate policy as I am concerned that this will be an issue for the vote. Please let me know if you have any questions.

Thanks - Bill

William T Smith, Associate Professor
Dept of Electrical and Computer Engineering
(859) 257-1009

From: Ett, Joanie M
Sent: Monday, December 5, 2016 10:36 AM
To: Szczapinski, Bridget <bridget.szczapinski@uky.edu>
Cc: Smith, William T <william.smith@uky.edu>; Pendergast, Julie <julie.pendergast@uky.edu>; Taylor, Bradley K <brad.taylor@uky.edu>
Subject: RE: PGY 394

Thank you! I will have the revisions reviewed by the UGC.

Joanie Ett-Mims
Division of Student and Academic Life
University of Kentucky
112 Frazee Hall

Lexington, KY 40506-0031
(859)257-9039
joanie.ett-mims@uky.edu

From: Szczapinski, Bridget
Sent: Thursday, December 01, 2016 2:19 PM
To: Ett, Joanie M <joanie.ett-mims@uky.edu>
Cc: Smith, William T <william.smith@uky.edu>; Pendergast, Julie <julie.pendergast@uky.edu>; Taylor, Bradley K <brad.taylor@uky.edu>
Subject: RE: PGY 394

Hi Joanie

I submitted the revised syllabus and research contract via eCats. I also made changes to the form in eCats.

Just in case, I'm also attaching all three documents here as well. One note: the course is to be offered fall, spring and summer. That is reflected in eCats but not on the attached report. It was somehow cut off in the printing process.

I hope this is helpful. Please let me know if there are questions. Thanks so much!

Bridget



Bridget Szczapinski

Administrative Support Associate I
University of Kentucky College of Medicine
Office of Biomedical Education
MS-415 Medical Sciences Building | Lexington, KY 40536-0298
859-218-6745 | bridget.szczapinski@uky.edu | graduate.med.uky.edu

From: Ett, Joanie M
Sent: Wednesday, November 30, 2016 1:54 PM
To: Szczapinski, Bridget
Subject: RE: PGY 394

Hi Bridget,

Is it a revised syllabus that needs to be uploaded or revisions to the eCATS form itself? If it's just a syllabus, you can forward that to me and I will attach it in eCATS. Revisions to the form are a little more complicated, but we can work through them if needed. ☺

Thanks,
Joanie

From: Szczapinski, Bridget
Sent: Wednesday, November 30, 2016 1:22 PM
To: Ett, Joanie M <joanie.ett-mims@uky.edu>
Subject: RE: PGY 394

Hi Joanie

I've been working with Dr. Taylor on this for the last couple of weeks. I think he is ready to submit all of his revisions. It is not obvious to me how to submit revisions in eCats. Can you direct me further? Thanks!

Bridget

SYLLABUS – PGY 394

PGY 394 - Independent research in Neurobiology and Neuroscience

Instructor of Record: TBA

Office:

Telephone:

E-Mail:

Office Hours:

Class Time and Location: To be determined with your Research Mentor

Texts: To be determined by the Research Mentor

Course Description: PGY 394 is designed to provide students with an intensive experience in laboratory or field research. Participants should take an active role in the design and execution of experiments and in the analysis and interpretation of data. They should be capable of "independent research" in the sense that they can conduct the experiments with little direct supervision. Students are expected to become familiar with related research in the current literature by regularly reading scientific journals. The student is expected to devote at least 3-5 hours per week for each credit hour enrolled to laboratory work, although often more time is necessary.

Research mentors agree to provide lab space, resources (eg. chemicals), and guidance. Guidance includes safety training as well as training in the scientific method, technique, and presentation.

Course Objectives:

- To design and conduct an original research project
- To develop experience with experimental techniques in the research area
- To develop a working knowledge of relevant research literature
- To be able to discuss the research and topic with other neuroscientists
- To learn the proper keeping of a lab notebook that clearly documents experimental procedure and the thought process leading to it

Student Learning Outcomes: By the end of the course, students will be able to develop (with guidance) and conduct a research project.

Attendance and make-up opportunities:

Attendance requirements and make-up opportunities for excused absences will be determined by the research mentor.

Excused Absences and Verification of Absences:

Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit “reasonable cause for nonattendance” by the professor.

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused absences) per university policy.

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

Grading:

The grade for Physiology 394 is assigned by the Research Mentor, in consultation with the Director of Undergraduate Studies for Neuroscience

Grades are based on three aspects of a student's performance:

- 1) Fulfillment of required hours in the laboratory. Students are expected to spend on average 3-5 hours per week for each credit hour enrolled. Failure to complete the expected number of hours will reduce the grade.
- 2) Performance in the laboratory context. Research courses are meant to promote student creativity and initiative even in projects that are already well-defined. At a minimum, students should seek to confirm their understanding of the project through discussions and readings, and should learn how to troubleshoot basic problems.
- 3) A final report. The format of the final report at the end of the semester will either be a 5 – 10 page description of the research activities or a first-author abstract from the student.

The Research Mentor will determine the exact weighting of each of these activities in the determination of your final grade. These weighting will be detailed on your PGY 394 Research Contract

Grading scale:

A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, E < 60%

Midterm grades will be available no later than the last day to submit midterm grades.

Completion of PGY 394 Contract

PGY 394 Contracts can be obtained by contacting the Physiology Director of Undergraduate Studies. This contract must be completed by both student and Research mentor and returned to the Director of Undergraduate Studies. Once the contract has been approved, the student will be informed by e-mail that he/she can now register for the course.

Disabilities/ Medical Conditions: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is <http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/>.

Course Policy on Classroom Civility and Decorum:

The university, college and department all have a commitment to respect the dignity of all and to value differences among members of our academic community. There exists the role of discussion and debate in academic discovery and the right of all to respectfully disagree from time-to-time. Students clearly have the right to take reasoned exception and to voice opinions contrary to those offered by the instructor and/or other students (S.R. 6.1.2). Equally, a faculty member has the right -- and the responsibility -- to ensure that all academic discourse occurs in a context characterized by respect and civility. Obviously, the accepted level of civility would not include attacks of a personal nature or statements denigrating another on the basis of race, sex, religion, sexual orientation, age, national/regional origin or other such irrelevant factors.

***A Note Concerning Academic Offenses (READ THIS INFORMATION CAREFULLY)

PLAGIARISM and CHEATING are serious academic offenses.

The following is an excerpt taken from the "Students Rights and Responsibilities Handbook, University of Kentucky" regarding cheating.

"Cheating is defined by its general usage. It includes, but is not limited to, the wrongful giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade."

The following is an excerpt taken from the "Students Rights and Responsibilities Handbook, University of Kentucky" regarding plagiarism.

"All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work..... If the words of someone else are used, the student MUST put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic."

Charges of an academic offense will be made against any student that cheats or commits plagiarism. Penalties for such an offense will be assessed according to University Regulations regarding Academic Offenses. The most severe penalties include suspension or dismissal from the University. There is a zero-tolerance policy regarding academic offenses.

**PGY 394 Independent Research in Neurobiology and Neuroscience
Research Contract**

In order to receive credit for PGY 394, students and their research mentors must complete a research contract. If the contract is not completed each semester by the add/drop date, we may drop you from the class. If the contract is NOT approved, we will contact you and/or your research mentor for revisions.

Research mentors may be any active faculty member in the Department of Physiology at the University of Kentucky. A list of faculty and their research interests may be found on the Department of Physiology web site.

Research mentors agree to provide lab space, resources (e.g. chemicals), and guidance. Guidance includes safety training as well as training in the scientific method, technique, and presentation. Mentors will be asked to evaluate student work for a grade.

Please provide the following information:

Semester & Academic Year (e.g. Spring 2016): _____

credits: _____

Your name: _____

Student ID Number: _____

Major: _____

Academic Rank (e.g. Junior): _____

Email: _____

Phone: _____

Please provide the following information about your mentor:

Faculty (Mentor) name: _____

Email: _____

Phone: _____

Complete page 2 in consultation with your research mentor.

**Independent Research in Neurobiology and Neuroscience
Credit Course Contract**

Student Name: _____

Semester & Academic Year: _____

Student Major: _____

Faculty (Mentor) Name: _____

Year (i.e. "Junior"): _____

Course Prefix & Number: PGY 394

Email: _____

Number of Credits: _____

Before beginning, the student must show evidence of completion for the following:

[Register](#) with the UK Office of Undergraduate Research.

Successfully complete research ethics education (human subjects, animal care and use, or lab safety - as directed by the mentor) www.research.uky.edu/ori/human/CITISSO-newuser.pdf

Complete the following Web Based Trainings (WBT), as directed by faculty mentor:

Bio-Safety Bloodborne Pathogens Chemical Hygiene Hazardous Waste

GENERAL EXPECTATIONS: (Stated expectations for time spent related to this research experience is exclusive of additional assignments/ activities beyond the time actually engaged in lab)

Fall or Spring Semester

For a one credit hour experience
3 – 5 hours per week, for 15 weeks, in the research experience
For a 2 credit hour experience
6 - 10 hours per week, for 15 weeks, in the research experience
For a 3 credit hour experience
9 - 15 hours per week, for 15 weeks, in the research experience

Eight-Week Summer Session

For a one credit hour experience
6-9 hours per week, for 8 weeks, in the research experience
For a 2 credit hour experience
12-18 hours per week, for 8 weeks, in the research experience
For a 3 credit hour experience
18-24 hours per week, for 8 weeks, in the research experience

Four-Week Summer Session

For a one credit hour experience
12-18 hours per week, for 4 weeks, in the research experience
For a 2 credit hour experience
24-36 hours per week, for 4 weeks, in the research experience

(You may attach the following on a separate page if necessary)

Description of Experience (goals, objectives, hypothesis):

Tasks for Completing Objectives (with timelines as needed):

Criteria, with Percentages, for Assessment (the University grading system will be used):

Mentor Signature: _____ Date: : _____

Student Signature: _____ Date: _____

Director of Undergraduate Research: _____ Date: _____