MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Ms. Robin Ayers
Dr. Nahid Gani
Dr. Scott Grubbs
Dr. Ting-Hui Lee
Dr. Jeremy Maddox
Dr. Andy Mienaltowski
Dr. Les Pesterfield
Dr. Todd Willian
Mr. Jason Wilson

FROM: Dr. Stuart Burris, Chair

SUBJECT: Agenda for Thursday, November 4th at 4:00 p.m.

A. OLD BUSINESS:

I. Consideration of the minutes of the September 2, 2021 meeting.
Consideration of the minutes of the email vote on October 6, 2021.

B. NEW BUSINESS:

Type of item	Description of Item & Contact Information
Informational	The following item was sent through the expedited process: Proposal to suspend a course: CHEM 412
Action	**Proposal to Create a Course** ANSC 458, Animal Growth and Meat Quality, 3 hrs. Contact: Luiz Pereira Silva, x5957
Action	**Proposal to Revise a Program** Ref. 623, Chemistry major, 33-53 hrs. Contact: Jeremy Maddox, Jeremy.maddox@wku.edu, x8725
Action	**Proposal to Create a New Course** PSYS 365: Laboratory in Behavioral Neuroscience, 1 hr. Contact: Andrew Mienaltowski, Andrew.mienaltowski@wku.edux, 270-681-0270

C. **OTHER BUSINESS**

Minutes – OCSE Curriculum Committee **September 2021**

Members Present:
Ms. Robin Ayers
Dr. Nahid Gani
Dr. Scott Grubbs
Dr. Ting-Hui Lee
Dr. Jeremy Maddox
Dr. Andy Mienaltowski
Dr. Becky Gilfillen for Dr. Todd Willian
Mr. Jason Wilson

FROM: Dr. Stuart Burris, Chair

The meeting was called to order at 4:00pm.

OLD BUSINESS:
Minutes from April 2021 meeting were approved with a friendly amendment to add Ms. Robin Ayers to the members present list.

NEW BUSINESS:

Consent Agenda
The Proposal to Revise a Course Preq/Coreq: CE 462 was not approved by SEAS before coming to the College Curriculum Committee. Ayers/Wilson motioned to remove the item from the agenda. Motion approved. Item was returned to SEAS.

Action Agenda
None.

Other Business:
None.

Minutes – OCSE Curriculum Committee **October 2021**

Due to the fact that we had one consent item and no other business to consider (and because we actually had brief discussion of this item at the September meeting), the item was submitted for email consideration and vote.

Members Present:

Ms. Robin Ayers
Dr. Nahid Gani
Dr. Scott Grubbs
Dr. Ting-Hui Lee
Dr. Jeremy Maddox
Dr. Andy Mienaltowski
Dr. Les Pesterfield
Dr. Todd Willian
Mr. Jason Wilson

FROM: Dr. Stuart Burris, Chair

OLD BUSINESS:
n/a

NEW BUSINESS:

Consent Agenda
Pesterfield/Willian moved to approve the Proposal to Revise a Course Preq/Coreq: CE 462. Motion received required number of minimum votes and was approved 10/6/21.

Action Agenda
None.

Other Business:
None.

Course Change Request

New Course Proposal

Date Submitted: 10/22/21 5:30 pm

Viewing: ANSC 458 : Animal Growth and Meat Quality

Last revision: 10/22/21 5:30 pm

Changes proposed by: lzh82661

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. **SC Curriculum Committee**
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 10/21/21 11:49 am Fred DeGraves (fred.degraves): Approved for AGRI Approval
2. 10/21/21 3:26 pm Stuart Burris (stuart.burris): Rollback to Initiator
3. 10/26/21 4:15 pm Fred DeGraves (fred.degraves): Approved for AGRI Approval
4. 10/29/21 10:39 am Stuart Burris (stuart.burris): Approved for SC Dean

Proposed Action	Active

Contact(s)

Name	E-mail	Phone
Luiz H. Pereira Silva	luiz.silva@wku.edu	2707455957

Term for implementation	Fall 2022
Academic Level	Undergraduate
Course prefix (subject area)	ANSC - Animal Science
Course number	458
Department	Agriculture
College	Science and Engineering
Course title	Animal Growth and Meat Quality
Abbreviated course title	Animal Growth and Meat Quality
Course description	Comprehensive overview of factors affecting animal growth, carcass composition, and meat quality.
Credit hours	3
Repeatable	No
Default grade type	Standard Letter
Alternate grade type(s)	
Is this course intended to span more than one term?	No
Schedule type	Lecture
CIP Code	010906 - Livestock Management.
Does this course have prerequisites	Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		ANSC 140	60	UG		No
And		BIOL 120	60	UG		No

Corequisites

Equivalent Courses

Restrictions:

College restriction?	No
Field of study restriction/major?	No
Classification restriction?	No
Departmental Restrictions	
Reason for developing the proposed course	This course is needed because the professionals in this field should understand the factors that affect animal growth and meat quality. This course provides applied knowledge that can be implemented in any livestock operation.

Is this related to other courses at WKU?	No
Are you seeking Colonnade approval for this course?	No
Is this course part of a program that leads to teacher certificate?	No

Learning outcomes

#	Learning outcomes
1	Describe the origin and formation of the main body tissues.
2	Explain how growth rate and carcass traits can be affected by common practices such as castration, dietary manipulation, and utilizing growth promoters.
3	Discuss the effect of carcass composition on feed efficiency and meat quality.
4	Recognize the differences in meat quality from distinct production systems, species, and breeds.

Content outline

#	Topic
1	General aspects of growth
2	Prenatal growth
3	Postnatal growth
4	Growth of body parts
5	Growth of carcass tissues
6	Hormonal control of animal growth
7	Compensatory growth
8	Animal Slaughter
9	Carcass evaluation
10	Conversion of muscle to meat
11	Muscle structure and fresh meat quality

Student expectations and requirements	
Tentative texts and course materials	1- The Science of Animal Growth and Meat Technology. By Steven M. Lonergan, David G. Topel, Dennis N. Marple, 2nd edition, 2019. ISBN: 978-0-12-815277-5 2- Growth of Farm Animals. By T.L.J. Lawrence and V.R. Fowler. 2nd edition, 2002. ISBN: 0–85199–484–9
Special equipment, materials, or library resources needed	There is no special equipment, materials, or library resources needed.
Additional information	
Supporting documentation	
Reviewer Comments	**Stuart Burris (stuart.burris) (10/21/21 3:26 pm):** Rollback: SLOs need editing as per separate email message from 10/21/2021.

Key: 9475

Program Change Request

Date Submitted: 10/25/21 10:47 am

Viewing: 623 : Chemistry, Bachelor of Science

Last approved: 09/27/21 1:40 pm

Last edit: 10/29/21 10:37 am

Changes proposed by: jrm82302

Catalog Pages Using this Program	Chemistry, Bachelor of Science (623)

In Workflow

1. **CHEM Approval**
2. **SC Dean**
3. **SC Curriculum Committee**
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Program Inventory

Approval Path

1. 10/27/21 11:51 am Kevin Williams (kevin.williams): Approved for CHEM Approval
2. 10/29/21 10:38 am Stuart Burris (stuart.burris): Approved for SC Dean

History

1. May 25, 2021 by Rheanna Plemons (rheanna.plemons)
2. Sep 27, 2021 by Jennifer Hammonds (jennifer.hammonds)

Proposed Action	Active

Contact Person

Name	Email	Phone
Jeremy B Maddox	jeremy.maddox@wku.edu	(270) 745-8725

Term of Implementation	2022-2023
Program Reference Number	623
Review Type	Full Review
Academic Level	Undergraduate
Program Type	Major
Degree Types	Bachelor of Science
Department	Chemistry
College	Science and Engineering
Program Name (eg. Biology)	Chemistry, Bachelor of Science
Will this program have concentrations?	Yes

Concentrations

Concentrations

ACS Approved (CHCR)
General Chemistry (CHGC)
Teacher Education (TCHR)
Pre-Jump Chemistry Advising (PJMP)
Foundations Chemistry Major (FCHM)

CIP Code	40.0501 - Chemistry, General.
Will this program lead to teacher certification?	**Yes** ~~No~~

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content

Program Overview (Catalog field: Overview tab)

The major in chemistry requires a minimum of 33 semester hours and leads to the Bachelor of Science degree. Requirements of the major include selecting one of four concentrations: ACS-Approved, Foundations, General, or Teacher Certification. The ACS-Approved Concentration does not require a minor or second major and is typically for students desiring graduate education in chemistry. The Foundations Concentration requires a minor or a second major and is appropriate for a wide range of career targets. The General Concentration requires a second major and is typically chosen by those in pre-health concentrations. The Teacher Certification Concentration is for students desiring Secondary Teacher Certification and requires a second major in Science and Mathematics Education (Reference Number 774). Prior to a selection of a program of study, a student should consult with a chemistry advisor to determine the most appropriate option.

Admission Requirements (Catalog field: Program Admission)

Curriculum Requirements (Catalog field: Program Requirements)

Program Requirements (33-53 hours)

Approved Shared Content from /shared/undergraduate-major-requirements/
Last Approved: Jul 21, 2021 1:36pm

A baccalaureate degree requires a minimum of 120 unduplicated semester hours. More information can be found at www.wku.edu/registrar/degree_certification.php.
Students who began WKU in the Fall 2014 and thereafter should review the Colonnade requirements located at: https://www.wku.edu/colonnade/colonnaderequirements.php.

ACS Approved Concentration (53 hours)

WKU is on the approved list of the Committee on Professional Training of the American Chemical Society. For the Chemistry Department to certify graduates in this concentration, the completion of a minimum of 53 hours of chemistry courses, 16-18 hours of math and science cognate courses, and the Colonnade general education courses for the Bachelor of Science is required. Required chemistry courses for the ACS Approved concentration are:

CHEM 120	College Chemistry I	5
& CHEM 121	and College Chemistry I Laboratory	
CHEM 222	College Chemistry II	5
& CHEM 223	and College Chemistry II Laboratory	
CHEM 320	Inorganic Chemistry I	3
CHEM 330	Quantitative Analysis	5
CHEM 340	Organic Chemistry I	5
& CHEM 341	and Organic Chemistry Laboratory I	
CHEM 342	Organic Chemistry II	5
& CHEM 343	and Organic Chemistry II Laboratory	
CHEM 398	Undergraduate Seminar	1
CHEM 399	Research Problems in Chemistry	2
CHEM 420	Inorganic Chemistry II	4
& CHEM 421	and Inorganic Chemistry Laboratory	
CHEM 435	Instrumental Analysis	5
& CHEM 436	and Instrumental Analysis Laboratory	
CHEM 446	Biochemistry I	3
CHEM 450	Physical Chemistry I	5
& CHEM 451	and Physical Chemistry I Laboratory	
CHEM 452	Physical Chemistry II	5
& CHEM 453	and Physical Chemistry II Laboratory	
Total Hours		53

Required Support Courses for ACS Approved Concentration (16-18 hours)[1]

MATH 136	Calculus I	4
MATH 137	Calculus II	4
Select one series from the following:		8-10
PHYS 231	Introduction to Physics and Biophysics I	
& PHYS 232	and Laboratory for Physics and Biophysics I	
& PHYS 332	and Introduction to Physics and Biophysics II	
& PHYS 233	and Laboratory for Physics and Biophysics II	
or		
PHYS 255	University Physics I	
& PHYS 256	and University Physics I Lab	
& PHYS 265	and University Physics II	
& PHYS 266	and University Physics II Laboratory	
Total Hours		16-18

[1]Students initially ineligible for MATH 136 should consult their academic advisor for the proper first course in mathematics. It is recommended that students in this program take MATH 237, MATH 307 and MATH 331 in addition to the minimum math requirements listed above. The University Physics track is strongly recommended for this concentration.

Foundations Concentration (37 hours)

Required Courses:

CHEM 120	College Chemistry I	5
& CHEM 121	and College Chemistry I Laboratory	
CHEM 222	College Chemistry II	5
& CHEM 223	and College Chemistry II Laboratory	
CHEM 320	Inorganic Chemistry I	3
CHEM 330	Quantitative Analysis	5
CHEM 340	Organic Chemistry I	5
& CHEM 341	and Organic Chemistry Laboratory I	
CHEM 342	Organic Chemistry II	5
& CHEM 343	and Organic Chemistry II Laboratory	
CHEM 398	Undergraduate Seminar	1
CHEM 446	Biochemistry I	3
~~CHEM 412~~	~~Introduction to Physical Chemistry~~	~~5~~

~~or CHEM 450~~	~~Physical Chemistry I~~	
~~& CHEM 451~~	~~and Physical Chemistry I Laboratory~~	
CHEM 450	**Physical Chemistry I**	**5**
& CHEM 451	**and Physical Chemistry I Laboratory**	
A minor or second major is required for this concentration		
Total Hours		37

Required Support Courses for the Foundations Concentration (8-9 hours)

MATH 136	Calculus I	4
Select one of the following course sequences:		
PHYS 231	Introduction to Physics and Biophysics I	4-5
& PHYS 232	and Laboratory for Physics and Biophysics I	
or PHYS 255	University Physics I	
& PHYS 256	and University Physics I Lab	
Total Hours		8-9

General Chemistry Concentration (33 hours)

The General Chemistry Concentration is recommended for pre-health professions students majoring in chemistry and other students who desire a double major.

CHEM 120	College Chemistry I	5
& CHEM 121	and College Chemistry I Laboratory	
CHEM 222	College Chemistry II	5
& CHEM 223	and College Chemistry II Laboratory	
CHEM 330	Quantitative Analysis	5
CHEM 340	Organic Chemistry I	5
& CHEM 341	and Organic Chemistry Laboratory I	
CHEM 342	Organic Chemistry II	5
& CHEM 343	and Organic Chemistry II Laboratory	
CHEM 320	Inorganic Chemistry I	3
or CHEM 446	Biochemistry I	
~~CHEM 412~~	~~Introduction to Physical Chemistry~~	~~5~~
~~or CHEM 450~~	~~Physical Chemistry I~~	
~~& CHEM 451~~	~~and Physical Chemistry I Laboratory~~	
CHEM 450	**Physical Chemistry I**	**5**
& CHEM 451	**and Physical Chemistry I Laboratory**	
A second major is required for this concentration.		
Total Hours		33

Additional Support Courses for the General Chemistry Concentration (8-9 hours)

MATH 136	Calculus I	4
Select one of the following sequences:		
PHYS 231	Introduction to Physics and Biophysics I	4-5
& PHYS 232	and Laboratory for Physics and Biophysics I	
or PHYS 255	University Physics I	
& PHYS 256	and University Physics I Lab	
Total Hours		8-9

Chemistry Major with Teacher Certification Concentration (33 hours)

Students interested in teaching chemistry must declare a second major in Science and Mathematics Education (SMED) available through the College of Education and Behavioral Sciences.

Chemistry Major Requirements

CHEM 120	College Chemistry I	5
& CHEM 121	and College Chemistry I Laboratory	
CHEM 222	College Chemistry II	5
& CHEM 223	and College Chemistry II Laboratory	
CHEM 320	Inorganic Chemistry I	3
CHEM 330	Quantitative Analysis	5
CHEM 340	Organic Chemistry I	5
& CHEM 341	and Organic Chemistry Laboratory I	
~~CHEM 412~~	~~Introduction to Physical Chemistry~~	~~5~~
~~or CHEM 450~~	~~Physical Chemistry I~~	
~~& CHEM 451~~	~~and Physical Chemistry I Laboratory~~	
CHEM 446	Biochemistry I	5
& CHEM 447	and Biochemistry Laboratory	
CHEM 450	**Physical Chemistry I**	**5**
& CHEM 451	**and Physical Chemistry I Laboratory**	
Total Hours		33

Required Support Courses for Teacher Education (16 hours)

MATH 136	Calculus I	4
PHYS 231	Introduction to Physics and Biophysics I	4
& PHYS 232	and Laboratory for Physics and Biophysics I	4

PHYS 332	Introduction to Physics and Biophysics II	
& PHYS 233	and Laboratory for Physics and Biophysics II	
GEOL 111	The Earth	4
& GEOL 113	and The Earth Laboratory	
Total Hours		16

SMED Major Requirements (37 hours)

SMED 101	Step 1: Introduction to Inquiry-Based Approaches to Teaching	3
SMED 102	Step 2: Introduction to Inquiry-Based Lesson Design	3
SMED 310	Knowing and Learning in Mathematics and Science	3
SMED 320	Classroom Interactions	3
SMED 340	Perspectives on Mathematics and Science	3
SMED 360	Research Methods for Math and Science Teachers	3
SMED 470	Project-Based Instruction	3
SMED 489	SMED Student Teaching Seminar	3
SEC 490	Student Teaching	10
Total Hours		34

4-Year Plan

ACS Approved Concentration

First Year

Fall	Hours	Spring	Hours
CHEM 120	5	CHEM 222	5
& CHEM 121		& CHEM 223	
MATH 136	4	MATH 137	4
ENG 100	3	COMM 145	3
Colonnade - Social & Behavioral Sciences	3	ENG 200	3
	15		15

Second Year

Fall	Hours	Spring	Hours
CHEM 330	5	CHEM 340	5
		& CHEM 341	
PHYS 255	5	PHYS 265	5
& PHYS 256		& PHYS 266	
CHEM 320	3	MATH 237	4
ENG 300	3		
	16		14

Third Year

Fall	Hours	Spring	Hours
CHEM 342	5	CHEM 399	1
& CHEM 343			
CHEM 398	1	CHEM 446	3
CHEM 399	1	CHEM 452	5
		& CHEM 453	
CHEM 450	5	Colonnade - Arts & Humanities	3
& CHEM 451			
HIST 101 or HIST 102	3	Colonnade - Social & Cultural	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
CHEM 399	1	CHEM 399	1
CHEM 435	5	CHEM 420	4
& CHEM 436		& CHEM 421	
Colonnade - Local to Global	3	Colonnade - Systems	3
General Elective	3	General Elective	3
General Elective	3	General Elective	4
	15		15

Total Hours 120

General Concentration

First Year

Fall	Hours	Spring	Hours
CHEM 120	5	CHEM 222	5
& CHEM 121		& CHEM 223	
MATH 136	4	COMM 145	3
ENG 100	3	Elective or Course in 2nd Major	3
Elective or Course in 2nd Major	3	ENG 200	3
	15		14

Second Year

Fall	Hours	Spring	Hours
	5		5

CHEM 340 & CHEM 341		CHEM 342 & CHEM 343	
PHYS 231 & PHYS 232	4	PHYS 332 & PHYS 233	4
ENG 300	3	HIST 101 or HIST 102	3
Elective or Course in 2nd Major	3	Elective or Course in 2nd Major	3
	15		15

Third Year

Fall	Hours	Spring	Hours
CHEM 446 or CHEM 320	3	CHEM 330	5
Elective or Course in 2nd Major	3	Colonnade - Social & Cultural	3
Colonnade - Arts & Humanities	3	Elective or Course in 2nd Major	3
Colonnade - Social & Behavioral Sciences	3	Elective or Course in 2nd Major	3
Colonnade - Natural & Physical Sciences w/ no lab	3		
	15		14

Fourth Year

Fall	Hours	Spring	Hours
CHEM 450 & CHEM 451	5	Colonnade - Systems	3
Colonnade - Local to Global	3	Elective or Course in 2nd Major	3
Elective or Course in 2nd Major	3	Elective or Course in 2nd Major	3
Elective or Course in 2nd Major	3	Elective or Course in 2nd Major	3
Elective or Course in 2nd Major	3	Elective or Course in 2nd Major	3
	17		15

Total Hours 120

Foundations Concentration

First Year

Fall	Hours	Spring	Hours
CHEM 120 & CHEM 121	5	CHEM 222 & CHEM 223	5
MATH 136	4	MATH 137	4
ENG 100	3	COMM 145	3
Elective or Course in Minor	3	ENG 200	3
	15		15

Second Year

Fall	Hours	Spring	Hours
CHEM 330	5	CHEM 340 & CHEM 341	5
PHYS 255 & PHYS 256	5	PHYS 265 & PHYS 266	5
CHEM 320	3	HIST 101 or HIST 102	3
ENG 300	3	Elective or Course in Minor	3
	16		16

Third Year

Fall	Hours	Spring	Hours
CHEM 342 & CHEM 343	5	CHEM 399	3
CHEM 398	1	CHEM 446	3
Colonnade - Arts & Humanities	3	Colonnade - Social & Cultural	3
Colonnade - Social & Behavioral Sciences	3	Elective or Course in Minor	3
Colonnade - Natural & Physical Sciences w/ no lab	3	Elective or Course in Minor	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
CHEM 450 & CHEM 451	5	Colonnade - Systems	3
Colonnade - Local to Global	3	Elective or Course in Minor	3
Elective or Course in Minor	3	Elective or Course in Minor	3
Elective or Course in Minor	3	Elective or Course in Minor	3
		Elective or Course in Minor	3
	14		15

Total Hours 121

Teacher Certification Concentration

First Year

Fall	Hours	Spring	Hours
CHEM 120 & CHEM 121	5	CHEM 222 & CHEM 223	5
MATH 117	3	MATH 136	4
SMED 101	3	SMED 102	3

ENG 100	3	COMM 145	3
HIST 101 or HIST 102	3	ENG 200	3
	17		18

Second Year

Fall	Hours	Spring	Hours
CHEM 330	5	CHEM 340 & CHEM 341	5
PHYS 231 & PHYS 232	4	PHYS 332 & PHYS 233	4
SMED 310	3	SMED 340	3
SMED 320	3	ENG 300	3
	15		15

Third Year

Fall	Hours	Spring	Hours
CHEM 320	3	SMED 360	3
GEOL 111 & GEOL 113	4	CHEM 450 & CHEM 451	5
SPED 330	3	LTCY 421	3
Colonnade - Arts & Humanities	3	Colonnade - Local to Global	3
Colonnade - Social & Cultural	3		
	16		14

Fourth Year

Fall	Hours	Spring	Hours
CHEM 446 & CHEM 447	5	SEC 490	10
SMED 470	3	SMED 489	3
Colonnade - Systems	3		
General Elective	1		
	12		13

Total Hours 120

Will this program be interdisciplinary?	No

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Communicate effectively in written form.	Laboratory reports from CHEM 451 (Physical Chemistry Lab): The lab report for the Crystal Violet (CVL) and Adiabatic Expansion (AEL) Laboratories were chosen, as it requires students to collect and analyze data and report on the results of the experiment in a clear fashion. Students are expected to analyze the data and arrive at accurate (reasonable) conclusions from this data. They are further required to communicate these results in a clear and effective way in scientific writing. The CVL is perform early in the semester and the AEL is performed later in the term. The measurement instrument is assessed in a fashion consistent with the Written Communication VALUE Rubric from AAC&U. Basic parameters for Context, Content, Conventions, Sources, and Syntax are rated on the 1 to 4 scale. A maximum score of 20 is possible.
SLO 2	Interpret and explain data about chemical systems.	American Chemical Society Exam in Analytical Chemistry: This is a nationally-normed 50-question multiple choice exam given at the conclusion of the CHEM 330 (Quantitative Analysis) course (required of all majors and minors).
SLO 3	Describe and discuss structure-property-function relationships for a variety of molecules.	American Chemical Society Exam in Organic Chemistry: This is a nationally-normed 50-question multiple choice exam given at the conclusion of the CHEM 342 (Organic Chemistry 2) course.

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Enter Location(s) and Percentage of Program Offered at Location(s)

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

No

Do you plan to offer 100% of this program online?

No

If no, enter the percentage of the program that will be taught online.

0

Do you plan to offer 100% of this program face-to-face?

Yes

Do you plan to offer at least 25% of this program through competency-based education

No

Library Resources

Attach library resources

Rationale for the program proposal?

CHEM 412 has not been offered for several years and will be suspended. The proposed program revision removes CHEM 412 from the program curriculum.

Additional Attachments

Additional information or attachments

Reviewer Comments

Key: 333

Course Change Request

New Course Proposal

Date Submitted: 10/05/21 3:47 pm

Viewing: PSYS 365 : Laboratory in Behavioral Neuroscience

Last revision: 10/19/21 10:15 am

Changes proposed by: and30774

In Workflow

1. PSYS Approval
2. SC Dean
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 10/05/21 4:03 pm Kelly Madole (kelly.madole): Approved for PSYS Approval
2. 10/07/21 2:23 pm Stuart Burris (stuart.burris): Approved for SC Dean

Proposed Action	Active

Contact(s)

Name	E-mail	Phone
Andrew Mienaltowski	andrew.mienaltowski@wku.edu	270-681-0270

Term for implementation	Fall 2022		
Academic Level	Undergraduate		
Course prefix (subject area)	PSYS - Psychological Sciences	Course number	365
Department	Psychological Sciences		
College	Science and Engineering		
Course title	Laboratory in Behavioral Neuroscience		
Abbreviated course title	LAB BEHAVIORAL NEURO		

Course description	Laboratory emphasizing neural anatomy and function with an emphasis on the biological bases of behavior.
Credit hours	1
Repeatable	No
Default grade type	Standard Letter
Alternate grade type(s)	
Is this course intended to span more than one term?	No
Schedule type	Lab
CIP Code	42.2706 - 42.2706
Does this course have prerequisites	Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
	(	PSYS 210	C	UG		No
Or		PSY 210	C	UG	)	No
And	(	PSYS 211	C	UG		No
Or		PSY 211	C	UG	)	No
And		PSYS 360		UG		Yes

Corequisites

Equivalent Courses

Restrictions:

College restriction?	No
Field of study restriction/major?	No
Classification restriction?	No
Departmental Restrictions	

Reason for developing the proposed course	The Department of Psychological Sciences offers PSYS 360 (Behavioral Neuroscience) for 3 credits and PSYS 362 (Behavioral Neuroscience with Lab) for 4 credits. PSYS 362 has a lab component but PSYS 360 does not. We are proposing PSYS 365 to replace the lab content from PSYS 362. Students would then take PSYS 360 and PSYS 365 to experience the course content and lab content, respectively. We hope to do this for two reasons: (1) PSYS 362 is usually offered in place of PSYS 360 in the spring, so offering PSYS 360 in both the Fall and Spring will create more flexibility for students in the major who need the course but do not need the lab content; and (2) Allowing for the pedagogical separation of the lab from the course creates flexibility in the order with which content can be taught. Our goal is to add the PSYS 365 course and then, once approved, phase PSYS 362 out of our undergraduate programs in the Department of Psychological Sciences. Lab courses on the science of the discipline are vital to the experiences of our students. The Department of Psychological Sciences currently offers four lab courses covering lab methods in cognition, psychological measurement, child development, and behavioral neuroscience (the focus of this proposal). Neuroscience continues to have a significant and increasing impact on psychology, and our behavioral neuroscience lab is popular amongst both psychological science majors and neuroscience minors. Understanding the biological bases of behavior is a key element of the science of psychology. Within the field of behavioral neuroscience, understanding the limitations and benefits of lab-based hypothesis-testing are critical to both (a) identifying the appropriate empirical approach and (b) understanding and evaluating previously published results. The proposed course prepares students who wish to work or seek additional education in neuroscience areas related to behavior and emphasizes learning through applied lab experiences. The proposed course contributes to the WKU mission by training students to conduct research and lead research efforts.
Is this related to other courses at WKU?	Yes
Related courses	PSYS 360 - Behavioral Neuroscience PSYS 362 - Behavioral Neuroscience with Lab
How are these related?	PSYS 365 will contain the lab content taught in PSYS 362. The lab content relates directly to the course material in PSYS 360, and the intent is for PSYS 365 to be a lab that stands alone and can be paired with PSYS 360 by students who wish to take it.
Are you seeking Colonnade approval for this course?	No
Is this course part of a program that leads to teacher certificate?	No

Learning outcomes

#	Learning outcomes
1	Locate major brain structures and describe function
2	Explain the mechanism of neural action
3	Identify techniques used to measure biochemical markers of stress and reproduction
4	Investigate the biological bases of memory, learning, language, emotions, and disorders

Content outline

#	Topic
1	Neuron structures and function
2	Gross brain structures
3	Sensory and Perceptual Systems (including the visual system, auditory system, chemo-sensory systems, and other perceptual systems)
4	Hormone and reproductive behavioral systems
5	Cognitive and socioemotional systems

Student expectations and requirements	Students complete in-class assignments related to the lab activities. Students will apply their understanding of neuroscience and of behavioral research methods developed in PSYS 360 Behavioral Neuroscience.
Tentative texts and course materials	American Psychological Association. (2020). Publication Manual of the American Psychological Association, 7th ed. Washington, DC: APA. Carlson, N. R., & Birkett, M. A. (2020). Foundations of Behavioral Neuroscience, 10th ed. Boston, MA: Allyn and Bacon. Diamond, M. C. & Scheibel, A. B. (1985). The Human Brain Coloring Book. New York, NY: Collins Reference Pinel, P. J., & Barnes, S. (2021). Biopsychology, 11th ed. New York, NY: Pearson Vanderah, T. (2019). Nolte's The Human Brain in Photographs and Diagrams, 5th ed. New York, NY: Elsevier.

Special equipment, materials, or library resources needed	The library resource forms is attached. The Department of Psychological Sciences has measurement equipment and brain models purchased in conjunction with PSYS 362. A portion of a course fee associated with this course will be used to periodically replace this equipment as well as to purchase expendable materials each year for brain dissection, electrophysiological recording, and chemical assays.
Additional information	
Supporting documentation	Syllabus PSYS 365.docx PSYS 365 library resource form.pdf
Reviewer Comments	

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