

**MEMORANDUM TO:** Ogden College of Science and Engineering Curriculum Committee

Dr. Katie Algeo  
Dr. Taha Alyousef  
Dr. Doug Harper  
Dr. Phil Lienesch  
Dr. Jeremy Maddox

Dr. Michelle Jackson  
Dr. Andy Mienaltowski  
Dr. Les Pesterfield  
Dr. Todd Willian

**FROM:** Kenneth Crawford, Chair

**SUBJECT:** Agenda for Thursday, February 28, 2018 4:00 p.m. in OCH 1028

**A. OLD BUSINESS:**

- I. Consideration of the minutes of the February 7, 2019 meeting.

**B. NEW BUSINESS:**

Type of item	Description of Item & Contact Information
Consent	<b>Proposal to Delete a Course</b> BIOL 150, Investigative Biotechnology Core I, 3hrs Contact: Scott Grubbs, <a href="mailto:scott.grubbs@wku.edu">scott.grubbs@wku.edu</a> , x5048
Consent	<b>Proposal to Delete a Course</b> BIOL 151, Investigative Biotechnology Core II, 3 hrs Contact: Scott Grubbs, <a href="mailto:scott.grubbs@wku.edu">scott.grubbs@wku.edu</a> , x5048
Consent	<b>Proposal to Delete a Course</b> BIOL 153, Investigative Biotechnology Module, 1 hr Contact: Scott Grubbs, <a href="mailto:scott.grubbs@wku.edu">scott.grubbs@wku.edu</a> , x5048
Consent	<b>Proposal to Delete a Course</b> BIOL 401, Biology of Algae, 3 Contact: Scott Grubbs, <a href="mailto:scott.grubbs@wku.edu">scott.grubbs@wku.edu</a> , x5048
Consent	<b>Proposal to Reactive a Suspended Course</b> BIOL 175, University Experience – Biology, 2 hrs Contact: Scott Grubbs, <a href="mailto:scott.grubbs@wku.edu">scott.grubbs@wku.edu</a> , x5048
Consent	<b>Proposal to Reactive a Suspended Course</b> BIOL 483, Multivariate Methods in Biology, 3 hrs Contact: Scott Grubbs, <a href="mailto:scott.grubbs@wku.edu">scott.grubbs@wku.edu</a> , x5048
Action	<b>Proposal to Revise a Program</b> Ref. 747 and 747E, Psychological Science, 38-50 hrs Contact: Andy Mienaltowski, <a href="mailto:Andrew.mienaltowski@wku.edu">Andrew.mienaltowski@wku.edu</a>

**C. OTHER BUSINESS**

**Minutes – OCSE Curriculum Committee**

**February 7, 2018**

**Members Present:**

Dr. Taha Alyousef  
Dr. Phil Lienesch  
Dr. Jeremy Maddox  
Dr. Michelle Jackson

Dr. Andy Mienaltowski  
Dr. Todd Willian  
Guest: John Khouryieh & Leslie Plumlee

**FROM:** Ken Crawford, Chair

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

**OLD BUSINESS:**

Maddox/Mienaltowski moved to approve of the minutes of the February 7<sup>th</sup> meeting. Motion passed.

**NEW BUSINESS:**

**Consent Agenda**

Mienaltowski/Maddox moved to approve the consent agenda. Motion passed.

**Action Agenda**

**School of Engineering & Applied Sciences**

Mienaltowski/Jackson moved to approve Proposal to Create a New Course: DATA 301. Motion passed with friendly amendment.

**Mathematics Department**

Maddox/Willian moved to Create a New Course: MATH 105. Motion passed.

**Psychological Sciences Department**

Maddox/Willian moved to approve Proposal to Create a Temporary Course (Second Offering): PSYS 175. Motion passed.

**OTHER BUSINESS:** None

Meeting Adjourned 4:12

Proposal Date: 3 February 2019

**Ogden College of Science and Engineering  
Department of Biology  
Proposal to Delete a Course  
(Consent Item)**

Contact Person: Scott Grubbs, [scott.grubbs@wku.edu](mailto:scott.grubbs@wku.edu), 745-5048

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: BIOL 150
- 1.2 Course title: Investigative Biotechnology Core I

**2. Rationale for the course deletion:** BIOL 150 used to serve as the first of a two-course introductory series (together with BIOL 151) to the then-active Investigative Biotechnology program. This program has since been revised, including a name change to Molecular Biotechnology, during the 16–17 AY and no longer includes BIOL 150 as a required or elective course.

**3. Effect of course deletion on programs or other departments, if known:** None

**4. Proposed term for implementation:** Earliest possible

**5. Dates of prior committee approvals:**

Department of Biology

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

February 15, 2019

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Proposal Date: 3 February 2019

**Ogden College of Science and Engineering  
Department of Biology  
Proposal to Delete a Course  
(Consent Item)**

Contact Person: Scott Grubbs, [scott.grubbs@wku.edu](mailto:scott.grubbs@wku.edu), 745-5048

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: BIOL 151
- 1.2 Course title: Investigative Biotechnology Core II

**2. Rationale for the course deletion:** BIOL 151 used to serve as the first of a two-course introductory series (together with BIOL 150) to the then-active Investigative Biotechnology program. This program has since been revised, including a name change to Molecular Biotechnology, during the 16–17 AY and no longer includes BIOL 151 as a required or elective course.

**3. Effect of course deletion on programs or other departments, if known:** None

**4. Proposed term for implementation:** Earliest possible

**5. Dates of prior committee approvals:**

Department of Biology

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

February 15, 2019

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Proposal Date: 3 February 2019

**Ogden College of Science and Engineering  
Department of Biology  
Proposal to Delete a Course  
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: BIOL 153
- 1.2 Course title: Investigative Biotechnology Module

**2. Rationale for the course deletion:** BIOL 153 was taught as individual one-credit modules that corresponded to topics taught in three-week portions in BIOL 150 and BIOL 151. Because both BIOL 150 and BIOL 151 are being deleted, by default, BIOL 153 will simultaneously go into deleted status and likewise have no impact the current Molecular Biotechnology program.

**3. Effect of course deletion on programs or other departments, if known:** None

**4. Proposed term for implementation:** Earliest possible

**5. Dates of prior committee approvals:**

Department of Biology

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

February 15, 2019

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Proposal Date: 3 February 2019

**Ogden College of Science and Engineering  
Department of Biology  
Proposal to Delete a Course  
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: BIOL 401
- 1.2 Course title: Biology of Algae

**2. Rationale for the course deletion:** BIOL 401 has been in suspended status since at least 1997. Biology does not perceive this course to fill any strategic needs and wishes to have it removed permanently.

**3. Effect of course deletion on programs or other departments, if known:** None

**4. Proposed term for implementation:** Earliest possible

**5. Dates of prior committee approvals:**

Department of Biology

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

February 15, 2019

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Proposal Date: 3 February 2019

**Ogden College of Science and Engineering  
Department of Biology  
Proposal to Reactivate a Suspended Course  
(Consent Item)**

Contact Person: Scott Grubbs, [scott.grubbs@wku.edu](mailto:scott.grubbs@wku.edu), 745-5049

**1. Identification of course:**

- 1.1 Course prefix (subject area) and number: BIOL 175
- 1.2 Course title: University Experience - Biology

**2. Rationale for the course reactivation:** BIOL 175 was placed into suspended status during the 13–14 AY. The most notable reasons were the course (1) had not been taught since the fall 2008 semester, and (2) did not have a place in curricular, recruitment, or retention initiatives within either Biology major (Programs 517 and 625) at that time. Recruitment and retention have since become paramount issues at the department, college, and university levels. Biology wishes to reactivate BIOL 175 and explore ways to revise the philosophical approach to the course to better align it with current and future departmental and university initiatives.

**3. Effect of course reactivation on programs or other departments, if known:** None

**4. Proposed term for implementation:** Earliest possible

**5. Dates of prior committee approvals**

Department of Biology

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

February 15, 2019

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Proposal Date: 3 February 2019

**Ogden College of Science and Engineering  
Department of Biology  
Proposal to Reactivate a Suspended Course  
(Consent Item)**

Contact Person: Scott Grubbs, [scott.grubbs@wku.edu](mailto:scott.grubbs@wku.edu), 745-5048

**1. Identification of course:**

- 1.1 Course prefix (subject area) and number: BIOL 483
- 1.2 Course title: Multivariate Methods in Biology

**2. Rationale for the course reactivation:** BIOL 483 was placed into suspended status during the 13–14 AY mainly because of low enrollment trends apparent from several prior years. Coincident to this was the creation of BIOL 583 (also an advanced statistics class) to essentially replace the graduate component of the course (483G) and enhance attractiveness to our in-resident graduate students. BIOL 583 was never taught, however, after the course creator moved on to another university. Biology has recently increased its instructional capacity and expertise to offer more advanced statistics class from a biological perspective, predicated this reactivation proposal.

**3. Effect of course reactivation on programs or other departments, if known:** Perhaps but only minor, and only if BIOL 483 is accepted as some point as an elective course in the Applied Statistics minor.

**4. Proposed term for implementation:** Earliest possible

**5. Dates of prior committee approvals**

Department of Biology

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

February 15, 2019

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**Proposal to Revise a program:  
Ogden College of Science and Engineering  
Department of Psychological Sciences**

**Section 1: Proponent Contact Information**

- 1.1 Name/Title: Andy Mienaltowski, Program Coordinator
- 1.2 Email address: andrew.mienaltowski@wku.edu
- 1.3 Phone #: (270) 745-2353

**Section 2: Program Information**

- 2.1 Current Program reference number: #747 and 747E
- 2.2 Current Program title: Psychological Science
- 2.3 Current total number of credits required in the program: 38-50

**Section 3: Proposed program revisions and rationales**

- 3.1 First revision: Add course PSYS 413 Psychological Measurement as a possible option for students to take to meet the program's lab requirement. This revision is being proposed to offer students a greater diversity of lab courses to meet this requirement. This course appeals to many students in the major given the importance of the psychological measurement development to the science of the discipline. Students who use PSYS 413 to complete the lab requirement will complete one less hour in the program, changing the range of hours from "38 to 50 hours" to "37 to 50 hours"
- 3.2 Second revision: Correct errant course number in program in the undergraduate catalog; specifically, PSYS 482 Psychology of Sexuality is misidentified as PSYS 483.

**Section 4: Consultations**

Do any of the proposed revisions in section 3 above involve or in any other way impact other departments/units? **NO**

If NO, simply proceed to item 5.

If YES, identify those revisions here, referring to them by the numbers assigned in section 3 above, and for each, indicate who in the affected department/unit was consulted, and the date of that consultation:

**Section 5: Proposed term for implementation: Fall 2019**

**Section 6: Approval Flow Dates:**

**Department of Psychological Sciences: 2/22/2019  
Ogden College Curriculum Committee:  
Undergraduate Curriculum Committee:  
University Senate:**

## Section 7: Required Appendices: Current & proposed program descriptions:

### 7.1 Current Program Description: (On a separate pages):

The Department of Psychological Sciences offers programs designed for students who are interested in a science-oriented degree that will prepare them for graduate study in psychology or a related field (e.g., medical school, pharmacy, physical therapy) or for employment in jobs where strong quantitative and research skills are required. The department provides two options for the Bachelor of Science degree. The ~~first~~ option requires a minimum of ~~38~~ credit hours and a minor or second major is required. The ~~second~~ option requires a minimum of ~~50~~ unduplicated credit hours and no minor or second major is required. For both options, students will complete a program of study that includes Core and Concentration components as well as a Laboratory Experience component. To complete the Core requirement, students will select a total of 25 to 28 credit hours from the following categories: Foundations of Psychology, Developmental Processes, Learning and Cognition, Individual Differences and Social Processes, Biological Bases of Behavior and Mental Processes, Research Methods and Statistics, and Integrative Science in Psychology. To complete the Concentration requirement, students will select courses from one or two of the six thematic concentrations or they may design a custom concentration (subject to approval by their advisor). To complete the Laboratory Experience component, students will complete one PSYS lab course or one PSYS lecture/lab course at the 300-level or above. Students in the ~~38-hour~~ option will complete 12 credit hours from one thematic concentration, or design a custom concentration by selecting 12 hours from courses not used to satisfy their Core requirement. Students choosing the ~~50-hour~~ option will complete 21-24 credit hours from two concentrations or 24 – 25 hours from the quantitative psychology concentration.

Students must maintain a minimum 2.50 GPA both overall and in the major. Either (1) MATH 116 and MATH 117, or (2) MATH 118 or higher is required; MATH 183 is recommended. Students who select the 50-hour option with the quantitative psychology concentration must complete MATH 136.

Students in the ~~38-hour~~ option of the Psychological Science major can count no more than 3 credits of PSYS 490 toward the major. Students in the ~~50-hour~~ option may count no more than 6 credits of PSYS 490 toward the major, with no more than 3 credits counting toward a single concentration's requirements.

*Applied Psychological Science.* This concentration focuses on how psychological science can be used to solve real-world problems in business, sports, or human engineering domains.

#### *Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 333, PSYS 350, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490

#### *Concentration Courses*

Required: PSYS 413

Electives: Choose 9 hours from PSYS 353, PSYS 360 or PSYS 362 or PSYS 363, PSYS 370, PSYS 433, PSYS 473, PSYS 481, PSYS 490, PSYS 499, PSY 340, PSY 355, PSY 412, PSY 470.

#### *Laboratory Experience*

~~Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.~~

*Biobehavioral Psychology.* This concentration provides knowledge of the biological bases of behavior and thought.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490

*Concentration Courses*

Required: PSYS 363

Electives: Choose 9 hours from PSYS 333, PSYS 431, PSYS 462, PSYS 463, PSYS 465, PSYS 483, PSYS 490, PSYS 499

*Laboratory Experience*

**Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.**

*Clinical Psychological Science.* This concentration focuses on mechanisms and etiologies of psychological health and dysfunction.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Choose 12 hours from PSYS 350, PSYS 353, PSYS 360 or PSYS 362, PSYS 413, PSYS 423, PSYS 425, PSYS 442, PSYS 450, PSYS 451, PSYS 453, PSYS 462, PSYS 465, PSYS 481, PSYS 482, PSYS 490, PSYS 499.

*Laboratory Experience*

**Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.**

*Cognitive Psychology.* This concentration emphasizes the scientific study of mental processes such as attention, perception, memory, problem-solving, thinking, and language use.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Choose 12 hours from PSYS 331, PSYS 363, PSYS 423, PSYS 431, PSYS 433, PSYS 462, PSYS 490, PSYS 499, PSY 412.

*Laboratory Experience*

**Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.**

*Developmental Science.* This addresses the physical, emotional, intellectual, social, perceptual, and personality growth of humans throughout the lifespan.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses:* Choose 12 hours from PSYS 220, PSYS 321, PSYS 423, PSYS 424, PSYS 425, PSYS 431, PSYS 463, PSYS 482, PSYS 490, PSYS 499.

*Laboratory Experience*

~~Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.~~

*Social Psychology.* This concentration emphasizes the study of how social situations affect behavior.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Required: PSYS 413

Electives: Choose 9 hours from PSYS 353, PSYS 433, PSYS 440, PSYS 450, PSYS 451, PSYS 453, PSYS 463, PSYS 483, PSYS 490, PSYS 499, PSY 412.

*Laboratory Experience*

~~Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.~~

*General Concentration.* This concentration allows students, with help from their advisor, to design an individualized theme.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Select 12-24 hours of electives from courses not used to satisfy Core requirements.

*Laboratory Experience*

~~Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300-level or above.~~

*Quantitative Psychology.* This concentration focuses on the use of advanced data manipulation and statistical analysis techniques within psychological science to examine discipline-specific research questions. This concentration requires at least 49 hours, so students do not need a minor or second major. Also, students in this concentration do not select another concentration within the Psychological Science major.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

CS 146 or CS 170 or CS 180, STAT 301, STAT 330, STAT 401 or STAT 402, PSYS 413, and 9 PSYS upper-level elective hours selected in consultation with an advisor.

*Laboratory Experience*

~~Select any one PSYS course with a laboratory or lecture/laboratory designation at the 300 level or above.~~

## 7.2 Proposed Program Description: (On a separate pages):

The Department of Psychological Sciences offers programs designed for students who are interested in a science-oriented degree that will prepare them for graduate study in psychology or a related field (e.g., medical school, pharmacy, physical therapy) or for employment in jobs where strong quantitative and research skills are required. The department provides two options for the Bachelor of Science degree. The **non-extended** option requires a minimum of **37** credit hours and a minor or second major is required. The **extended** option requires a minimum of **49** unduplicated credit hours and no minor or second major is required. For both options, students will complete a program of study that includes Core and Concentration components as well as a Laboratory Experience component. To complete the Core requirement, students will select a total of 25 to 28 credit hours from the following categories: Foundations of Psychology, Developmental Processes, Learning and Cognition, Individual Differences and Social Processes, Biological Bases of Behavior and Mental Processes, Research Methods and Statistics, and Integrative Science in Psychology. To complete the Concentration requirement, students will select courses from one or two of the six thematic concentrations or they may design a custom concentration (subject to approval by their advisor). To complete the Laboratory Experience component, students will complete one PSYS lab course or one PSYS lecture/lab course at the 300-level or above. Students in the **non-extended** option will complete 12 credit hours from one thematic concentration, or design a custom concentration by selecting 12 hours from courses not used to satisfy their Core requirement. Students choosing the **extended** option will complete 21-24 credit hours from two concentrations or 24 – 25 hours from the quantitative psychology concentration.

Students must maintain a minimum 2.50 GPA both overall and in the major. Either (1) MATH 116 and MATH 117, or (2) MATH 118 or higher is required; MATH 183 is recommended. Students who select the 50-hour option with the quantitative psychology concentration must complete MATH 136.

Students in the **non-extended** option of the Psychological Science major can count no more than 3 credits of PSYS 490 toward the major. Students in the **extended** option may count no more than 6 credits of PSYS 490 toward the major, with no more than 3 credits counting toward a single concentration's requirements.

*Applied Psychological Science.* This concentration focuses on how psychological science can be used to solve real-world problems in business, sports, or human engineering domains.

### *Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 333, PSYS 350, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490

### *Concentration Courses*

Required: PSYS 413

Electives: Choose 9 hours from PSYS 353, PSYS 360 or PSYS 362 or PSYS 363, PSYS 370, PSYS 433, PSYS 473, PSYS 481, PSYS 490, PSYS 499, PSY 340, PSY 355, PSY 412, PSY 470.

### *Laboratory Experience*

**PSYS 413**

*Biobehavioral Psychology.* This concentration provides knowledge of the biological bases of behavior and thought.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490

*Concentration Courses*

Required: PSYS 363

Electives: Choose 9 hours from PSYS 333, PSYS 431, PSYS 462, PSYS 463, PSYS 465, PSYS **482**, PSYS 490, PSYS 499

*Laboratory Experience*

**PSYS 322, PSYS 334, PSYS 362, or PSYS 413**

*Clinical Psychological Science.* This concentration focuses on mechanisms and etiologies of psychological health and dysfunction.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Choose 12 hours from PSYS 350, PSYS 353, PSYS 360 or PSYS 362, PSYS 413, PSYS 423, PSYS 425, PSYS 442, PSYS 450, PSYS 451, PSYS 453, PSYS 462, PSYS 465, PSYS 481, PSYS 482, PSYS 490, PSYS 499.

*Laboratory Experience*

**PSYS 322, PSYS 334, PSYS 362, or PSYS 413**

*Cognitive Psychology.* This concentration emphasizes the scientific study of mental processes such as attention, perception, memory, problem-solving, thinking, and language use.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Choose 12 hours from PSYS 331, PSYS 363, PSYS 423, PSYS 431, PSYS 433, PSYS 462, PSYS 490, PSYS 499, PSY 412.

*Laboratory Experience*

**PSYS 322, PSYS 334, PSYS 362, or PSYS 413**

*Developmental Science.* This addresses the physical, emotional, intellectual, social, perceptual, and personality growth of humans throughout the lifespan.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses:* Choose 12 hours from PSYS 220, PSYS 321, PSYS 423, PSYS 424, PSYS 425, PSYS 431, PSYS 463, PSYS 482, PSYS 490, PSYS 499.

*Laboratory Experience*

**PSYS 322, PSYS 334, PSYS 362, or PSYS 413**

*Social Psychology.* This concentration emphasizes the study of how social situations affect behavior.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Required: PSYS 413

Electives: Choose 9 hours from PSYS 353, PSYS 433, PSYS 440, PSYS 450, PSYS 451, PSYS 453, PSYS 463, PSYS **482**, PSYS 490, PSYS 499, PSY 412.

*Laboratory Experience*

**PSYS 413**

*General Concentration.* This concentration allows students, with help from their advisor, to design an individualized theme.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*

Select 12-24 hours of electives from courses not used to satisfy Core requirements.

*Laboratory Experience*

**PSYS 322, PSYS 334, PSYS 362, or PSYS 413**

*Quantitative Psychology.* This concentration focuses on the use of advanced data manipulation and statistical analysis techniques within psychological science to examine discipline-specific research questions. This concentration requires at least 49 hours, so students do not need a minor or second major. Also, students in this concentration do not select another concentration within the Psychological Science major.

*Core Courses*

PSYS 100 or PSYS 160, PSYS 220 or PSYS 321, PSYS 331 or PSYS 333, PSYS 350 or PSYS 440, PSYS 360 or PSYS 362 or PSYS 363, PSYS 210, PSYS 211, PSYS 313, PSYS 380 or PSYS 481 or PSYS 490.

*Concentration Courses*



CS 146 or CS 170 or CS 180, STAT 301, STAT 330, STAT 401 or STAT 402, PSYS 413, and 9 PSYS upper-level elective hours selected in consultation with an advisor.

*Laboratory Experience*

**PSYS 413**