MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Taha Alyousef
Dr. Doug Harper
Dr. Andy Mienaltowski
Dr. Michelle Jackson
Dr. Les Pesterfield
Dr. Pat Kambesis
Dr. Todd Willian
Dr. Phil Lienesch

FROM: Greg Arbuckle, Interim Chair

SUBJECT: Agenda for Thursday, September 26, 2019 4:00 p.m. in OCH 1010

A. OLD BUSINESS:

I. Consideration of the minutes of the May 2, 2019 meeting.

B. NEW BUSINESS:

Type of item	Description of Item & Contact Information		
Consent	Proposal to Revise Course Prerequisites/Corequisites		
	BIOL 131, Human Anatomy and Physiology, 4 hrs.		
	Contact: Scott Grubbs, scott.grubbs@wku.edu, x5048		
Consent	Proposal to Revise Course Prerequisites/Corequisites		
	BIOL 120, Biological Concepts: Cells, Metabolism, and Genetics		
	Contact: Scott Grubbs, scott.grubbs@wku.edu, x5048		
Consent	Proposal to Revise Course Prerequisites/Corequisites		
	BIOL 122, Biological Concepts: Evolutions, Diversity, and Ecology		
	Contact: Scott Grubbs, scott.grubbs@wku.edu, x5048		
Consent	Proposal to Revise a Course Title		
GEOG 492, Advanced Spatial Analysis, 3 hrs.			
	Contact: Jun Yan, junyah@wku.edu, x8952		
Consent	Proposal to Revise a Course Title		
	GISC 423, Geoprocessing and GIS Applications, 3 hrs.		
	Contact: Jun Yan, junyah@wku.edu, x8952		
Action	Proposal to Revise a Program		
	Ref. 174, Certificate in Biology, 20 hrs.		
	Contact: Kevin Cary, kevin.cary@wku.edu, x2981		
Action	Proposal to Make Multiple Revisions to a Course		
	CHEM 304, Biochemistry for the Health Sciences, 3 hrs.		
	Contact: Jeremy Maddox, Jeremy.maddox@wku.edu, x8725		
Action	Proposal to Create a New Course		
	PSYS 175, University Experience, 1 hr.		
	Contact: Andrew Mienaltowski, andrew.mienaltowski@wku.edu,		
	x3918		

C. OTHER BUSINESS

Minutes - OCSE Curriculum Committee

May 2, 2019

Members Present:

Dr. Katie Algeo

Dr. Taha Alyousef

Dr. Phil Lienesch

Dr. Jeremy Maddox

Dr. Michelle Jackson

Dr. Andy Mienaltowski

Dr. Les Pesterfield

Dr. Todd Willian

Guest: Mr. Jason Wilson

FROM: Ken Crawford, Chair

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

OLD BUSINESS:

Algeo/Mienaltowski moved to approve of the minutes of the April 4th meeting. Motion passed.

NEW BUSINESS:

Consent Agenda

Algeo/Mienaltowski moved to approve the consent agenda. CE 176, EM 222, EM 303 were moved to action agenda and passed with friendly amendments. The remaining consent items: HORT 426, EM 221, EM 302, INFO 336, ENGR 490, and ENGR 491 passed unanimously.

Action Agenda

Mathematics Department

Jackson/Willian moved to approve Proposal to Revise a Program: Ref. 417, Minor in Mathematics. Motion passed unanimously with friendly amendment.

School of Engineering & Applied Sciences

Willian/Jackson moved to approve Proposal to Revise a Program Ref. 5006, MET. Motion passed unanimously.

Mienaltowski/Jackson moved to approve Proposal to Make Multiple Revisions to a Course: AMS 101. Motion passed unanimously with friendly amendment.

OTHER BUSINESS: None

Proposal Date: September 9, 2019

Ogden College of Science and Engineering Department of Biology Proposal to Revise Course Prerequisites/Corequisites (Consent Item)

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

1	Iden	tificati	on of	course:

- 1.1 Course prefix (subject area) and number: BIOL 131
- 1.2 Course title: Human Anatomy and Physiology
- 2. Current prerequisites/corequisites/special requirements: None
- 3. Proposed prerequisites/corequisites/special requirements: Restrict students from Program Reference #225 (Cornerstone 2) and #809 (Cornerstone) from enrolling in BIOL 131.
- 4. Rationale for the revision of prerequisites/corequisites/special requirements: BIOL 131 is a content heavy course that requires established study skills and time management for success. One purpose of the Cornerstone program is to provide these types of skills as students learn to navigate college. Placing students in BIOL 131 during their first year prior to acclimating to college puts these students at a disadvantage. The success rate for students in both Cornerstone programs is very low, suggesting that these students are not yet ready for this rigorous course. Biology has compiled four calendar years (including summer) of course performance data. The overall grade distribution data for 84 students who completed the course is presented below:

A=0 (0%), B=1 (1.2%), C=8 (9.5%), D=16 (19.0%), F=53 (63.1%), FN=6 (7.1%), W=0 (0%)

Overall, a DFW rate of 89.3% (75/84)

- 5. Effect on completion of major/minor sequence: Students who complete the Cornerstone Program can transition into their major of choice. But, students cannot move past BIOL 131 to BIOL 231 (Advanced Human Anatomy and Physiology) will not be admitted into programs such as Nursing and Dental Hygiene without a minimum grade of "C".
- 6. Proposed term for implementation: Spring 2020
- 7. Dates of prior committee approvals:

Department of Biology	September 13, 2019
Ogden College Curriculum Committee	
General Education Committee (if applicable)	
Undergraduate Curriculum Committee	
University Senate	

Proposal Date: September 9, 2019

Ogden College of Science and Engineering Department of Biology Proposal to Revise Course Prerequisites/Corequisites (Consent Item)

Contact Person: Scott Grubbs, scott.g	grubbs(<i>a</i>)wku.edu,	745-5048
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- 1. Identification of course:
 - 1.1 Course prefix (subject area) and number: BIOL 120
 - 1.2 Course title: Biological Concepts: Cells, Metabolism, and Genetics
- 2. Current prerequisites/corequisites/special requirements: None
- 3. **Proposed prerequisites/corequisites/special requirements:** Restrict students from within Program Reference #225 (Cornerstone 2) and #809 (Cornerstone) from enrolling in BIOL 120.
- 4. Rationale for the revision of prerequisites/corequisites/special requirements: BIOL 120 is major-level Biology course, intended to serve as a primer for several 200- and 300-level majors-level courses. The success rate for students in both Cornerstone programs is very low, suggesting that these students are not yet ready for this difficult course. Biology has compiled four calendar years (including summer) of course performance data. The overall grade distribution data for 41 students who completed the course is presented below:

Overall, a DFW rate of 78.0% (32/41)

- 5. Effect on completion of major/minor sequence: Students who complete the Cornerstone Program can transition into their major of choice. But, students cannot move past BIOL 120 and into the Biology major (Programs #617 and #525) without a minimum of a C grade.
- 6. Proposed term for implementation: Spring 2020
- 7. Dates of prior committee approvals:

Department of Biology	September 13, 2019
Ogden College Curriculum Committee	
Professional Education Council (if applicable)	
General Education Committee (if applicable)	
Undergraduate Curriculum Committee	1
University Senate	

Proposal Date: September 9, 2019

Ogden College of Science and Engineering Department of Biology Proposal to Revise Course Prerequisites/Corequisites (Consent Item)

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

1	Identification	of	course:

- 1.1 Course prefix (subject area) and number: BIOL 122
- 1.2 Course title: Biological Concepts: Evolution, Diversity, and Ecology
- 2. Current prerequisites/corequisites/special requirements: None
- 3. Proposed prerequisites/corequisites/special requirements: Restrict students from within Program Reference #225 (Cornerstone 2) and #809 (Cornerstone) from enrolling in BIOL 122.
- 4. Rationale for the revision of prerequisites/corequisites/special requirements: BIOL 122 is major-level Biology course, intended to serve as a primer for several 200- and 300-level majors-level courses. The success rate for students in both Cornerstone programs is very low, suggesting that these students are not yet ready for this difficult course. Biology has compiled four calendar years (including summer) of course performance data. The overall grade distribution data for 32 students who completed the course is presented below:

A=0 (0%), B=3 (8.6%), C=4 (11.4%), D=6 (17.1%), F=20 (57.1%), FN=2 (5.7%), W=0 (0%)

Overall, a DFW rate of 80.0% (28/35)

- **5. Effect on completion of major/minor sequence:** Students who complete the Cornerstone Program can transition into their major of choice. But, students cannot move past BIOL 122 and into the Biology major (Programs #617 and #525) without a minimum of a C grade.
- 6. Proposed term for implementation: Spring 2020
- 7. Dates of prior committee approvals:

Department of Biology	September 13, 2019
Ogden College Curriculum Committee	
Professional Education Council (if applicable)	
General Education Committee (if applicable)	
Undergraduate Curriculum Committee	
University Senate	

Proposal Date: 4/9/2019

Ogden College of Science and Engineering Department of Geography & Geology Proposal to Revise Course Title (Consent Item)

Contact Person: Jun Yan, jun.yan@wku.edu, 270-745-8952

1.	 Identification of proposed course: 1.1 Course prefix (subject area) and number: GEOG 4 1.2 Course title: Advanced Spatial Analysis 1.3 Credit Hours: 3 	192			
2.	Proposed course title: Advanced Geospatial Analytics				
3.	Proposed abbreviated course title: Advanced Geospatial Analytics				
anaiys	Rationale for the revision of course title: In the GIS industry, geospatial analytics is becoming ore popular term due to the increased need to analyze of Big Data while the traditional term, spatial lysis, is often used in academics. We propose this change so that this course is more recognizable by ential employers of WKU students.				
5.	Proposed term for implementation: Spring 2020				
5.	Dates of prior committee approvals:				
	Department/ Unit Geography and Geology Ogden College Curriculum Committee Professional Education Council (if applicable) General Education Committee (if applicable) Undergraduate Curriculum Committee University Senate	8/22/19			
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Proposal Date: 4/9/2019

Ogden College of Science and Engineering Department of Geography & Geology Proposal to Revise Course Title (Consent Item)

Contact Person: Jun Yan, jun.yan@wku.edu, 270-745-8952

1.	1.1 1.2 1.3	Course prefix (subject area) and number: GISC 423 Course title: Geoprocessing and GIS Applications Credit Hours: 3		
2.		sed course title: GIS and Location Analytics		
3.	Propos	ed abbreviated course title: GIS & Location Analyti	cs	
provid geogra	Rationale for the revision of course title: This advanced GIS course mainly covers data and hniques important to applying GIS in locational analysis and urban applications. The original title is a general. Location analytics is a popular term in the industry where GIS data and methods are used to evide useful information for making decisions on locations, operations, logistics, and business or operations. We propose this title change, so the course can be more recognizable by potential employers WKU students.			
5.	Propose	ed term for implementation: Spring 2020		
6.	Dates of prior committee approvals:			
	Departm	ent/ Unit Geography and Geology	8/22/19	
		Ogden College Curriculum Committee	and the second s	
	Profession	onal Education Council (if applicable)		
	General	Education Committee (if applicable)		
	Undergra	aduate Curriculum Committee		
	Universi	y Senate		

Ogden College of Science & Engineering Department of Geography & Geology Proposal to Revise A [Certificate] Program (Action Item)

Contact Person: Kevin B. Cary, kevin.cary@wku.edu, 5-2981

1. Identification of program:

- 1.1 Current program reference number: #174
- 1.2 Current program title: Certificate in GIS
- 1.3 Credit hours: 20

2. Identification of the proposed program changes:

- Include more options that provide a specific spatial component, in addition to the existing 100-level courses in the current program.
- 3. Detailed program description: Numbers in () indicate credit hours.
 - Proposed Changes to Undergraduate Certificate in GIS

Current Program	Revised Program
GEOG 103 (3) or GEOL 103 (3) or GEOL 111 (3) or METR 121, and GEOG 110 (3)	GEOG 103 (3) or GEOL 103 (3) or GEOL 111 (3) or METR 121, and GEOG 110 (3); or six credit hours of suitable courses approved by the Certificate advisor.
GISC 316 (4) Fundamentals of GIS	GISC 316 (4) Fundamentals of GIS
GISC 317 (4) GIS	GISC 317 (4) GIS
GISC 417 (3) GIS Analysis	GISC 417 (3) GIS Analysis
GISC 419 (3) GIS Programming	GISC 419 (3) GIS Programming

4. Rationale for the proposed program change:

Several existing courses outside of the Department of Geography and Geology provide a useful spatial component, such as Land Surveying (CE 160/161) and Principles of Wildlife Ecology and Management (BIOL 232). Geospatial technologies are utilized in a variety of fields and are becoming more prevalent across the curriculum. The results of research using these technologies are being reflected in myriad disciplines across higher education. Mapping is a dominant function of Geographic Information Systems (or GIS), which provides a visual interpretation of spatial data. Providing students the flexibility to substitute appropriate coursework should help encourage students from many other disciplines to enroll in the GIS Certificate program.

5. Proposed term for implementation and special provisions (if applicable):

Spring 2019

Geography-Geology Curriculum Committee	08-22-2019
Ogden College Curriculum Committee	All and a second
Professional Education Council (if applicable)	
Undergraduate Curriculum Committee	
University Senate	

Dates of prior committee approvals:

6.

Proposal Date: 09/05/2019

Ogden College of Science & Engineering Department of Chemistry Proposal to Make Multiple Revisions to a Course (Action Item)

Contact Person: Jeremy B. Maddox, jeremy.maddox@wku.edu, 5-8725

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CHEM 304
- 1.2 Course title: Biochemistry for the Health Sciences

2. Revise course title:

- 2.1 Current course title:
- 2.2 Proposed course title:
- 2.3 Proposed abbreviated title:
- 2.4 Rationale for revision of course title:

3. Revise course number:

- 3.1 Current course number:
- 3.2 Proposed course number:
- 3.3 Rationale for revision of course number:

4. Revise course prerequisites/corequisites/special requirements:

- 4.1 Current prerequisites/corequisites/special requirements: (indicate which)
- 4.2 Proposed prerequisites/corequisites/special requirements:
- 4.3 Rationale for revision of course prerequisites/corequisites/special requirements:
- 4.4 Effect on completion of major/minor sequence:

5. Revise course catalog listing:

5.1 Current course catalog listing:

A brief treatment of organic chemistry is used as an introduction to carbohydrates, lipids, proteins and nucleic acids emphasizing their functional roles in the biological system. Specific topics will include bioenergetics, enzymes, acid-base balance, hematology and immunology. The course is offered specifically for students in the four-year nursing program, but is also recommended for students in physical education, recreation, health and safety and other disciplines dealing with human health. This course does not count toward a major or minor in biology or chemistry.

5.2 Proposed course catalog listing:

A brief treatment of organic chemistry is used as an introduction to carbohydrates, lipids, proteins and nucleic acids emphasizing their functional roles in the biological system. Specific topics will include bioenergetics, enzymes, and acid-base balance. This course does not count toward a major or minor in biology or chemistry.

5.3 Rationale for revision of course catalog listing:

The hematology and immunology parts of this course have not been taught in years, and we have adjusted the course description to reflect the coverage changes. The population of CHEM 304 has also changed over the years. Nursing students are no longer required to take the course.

6. Revise course credit hours:

- 6.1 Current course credit hours: 4
- 6.2 Proposed course credit hours: 3
- 6.3 Rationale for revision of course credit hours:

After discussing the credit hours with the main stakeholders in the course it was deterimined to be beneficial to reduce the course hours from 4 credit to 3 so that it only covers one scheduling block.

7. Revise schedule type:

- 7.1 Current schedule type:
- 7.2 Proposed schedule type:
- 7.3 Rationale for revision of schedule type:

8. Revise grade type:

- 8.1 Current grade type:
- 8.2 Proposed grade type:
- 8.3 Rationale for revision of grade type:

10. Proposed term for implementation:

First available

11. Dates of prior committee approvals:

Department of Chemistry	9/6/2019	
Ogden College Curriculum Committee		
Professional Education Council (if applicable)	N/A	
General Education Committee (if applicable)	N/A	
Undergraduate Curriculum Committee		
University Senate		

(Action Item)

Proposal to Create a New Course:
Ogden College of Science and Engineering
Department/Unit: Department of Psychological Sciences

Section 1: Proponent Contact Information

1.1 Name/Title: Dr. Andrew Mienaltowski

1.2 Email address: andrew.mienaltowski@wku.edu

1.3 Phone #: (270) 681-0270

Section 2: Course Catalog Information

2.1 Course prefix (subject area) and number: PSYS 175

2.2 Course CIP code: 42

2.3 Course title: University Experience

2.4 Abbreviated Course title: PSYS UNIV EXPERIENCE

2.5 Credit hours/Variable credit: 1

2.6 Repeatability: N

2.7 Course Term: Is this course intended to span more than a single term?

YES NO

- **2.8 Course Catalog Description:** Transition to university experience for Psychological Science majors. Topics include learning skills, campus resources, research tools, exploration of majors, specializations within discipline, career trends, and professional development.
- **2.9 Prerequisite/Corequisites/Restrictions:** For beginning college freshmen or transfer students with fewer than 36 semester hours of credit
- 2.10 Additional Enrollment Requirements:
- 2.11 Other Special Course Requirements:

2.12 Grade Type: Standard Grade (A-F)

2.13 Schedule Type: Seminar

Section 3: Description of proposed course

3.1 Course Content Summary:

The proposed course will be offered in seminar format; students will attend for one hour per week and learn about a variety of topics that are relevant to their orientation to the university as a psychological science student. Topics to be discussed include, but are not limited to:

- Professional training tracks within the psychological sciences
- Development of a personal plan for academic success
- Utilization of campus information technology
- Navigation of campus resources, from library to student organizations
- Financial considerations within discipline-specific training
- Student engagement through internships and research
- Identity development and maintenance as a professional in the psychological sciences
- Orientation to empirical research in the psychological sciences
- The clinical scientist and scientist-practitioner models
- Preparation for careers in psychological science

3.2 Learning Outcomes:

Upon successful completion of the course, students should be able to:

- Describe the different tracks of study within psychological science
- Construct a professional plan for pursuing future academic and career training in psychological science
- Identify appropriate professional behaviors for psychological scientists
- Recognize the resources available to them at the university and part of professional organizations that will facilitate training in the discipline
- Discuss examples of research activities that students pursue as undergraduates

3.3 Assessment/Evaluation:

Students will be assessed in the course using performance on a number of activities, class participation, seminar attendance, and/or summative assessments or project products that demonstrate meeting the learning objectives for the course.

Section 4: Rationale

4.1 Reason for developing this proposed course:

Courses like UC 175 provide academic programs with an opportunity to impart useful information to undergraduates that can benefit students as they transition to university experiences, including choosing academic tracks, considering future career directions, and utilizing campus resources to stay connected to the academic program. This is vital to the psychological sciences, as students have many possible tracks of study to select from while making progress toward a career and can be unsure about what track to select given their career aspirations. In PSYS 175, students network with department faculty to encourage involvement in facultymentored, student-centered research as well as involvement in professional activities that allow students to explore the tracks within the discipline. Additionally,

students develop greater knowledge of various disciplines and careers in psychology and insight into how to pursue a particular career of interest.

4.2 Relationship to similar courses offered by other university departments/units:

- Do any other courses already being offered by other university departments/units share content with this proposed course?

 YES
 NO
- Are any of the proposed pre/co-requisites for this course offered by another university department/unit? YES NO
- If the answer to both questions is NO, simply proceed to item 5.
- If the answer to either of those questions is YES, indicate here who in the affected departments/units was consulted, and the dates of those consultations:
 - No other department was consulted. Students who complete this course would not take a university experience course offered by other units.

Section 5: Projected Enrollments/Resources

- **5.1** How many students per section are expected to enroll in this proposed course? Approximately 20 to 25
- 5.2 How many sections of this course per academic year will be offered? 2-3
- 5.3 How many students per academic year are expected to enroll? 35-50
- 5.4 How were these projections calculated? Explain any supporting evidence/data you have for arriving at these projections. These projections are based on the number of incoming students who declare a major in Psychological Sciences. Existing enrollment in a temporary course version of PSYS 175 are consistent with these projections.
- **5.5 Proposed method of staffing:** Existing faculty
- **5.6 Instructional technology resources:** Existing resources are sufficient
- **5.7 Library resources:** Will this proposed course require the use of library resources (books, journals, reference materials, audio-visual materials, electronic databases, etc.)? **YES** NO
 - If YES, was a <u>Library Resources Form</u> submitted to the appropriate collection development librarian prior to consideration at the college curriculum level?

Section 6: Proposed term for implementation: Fall 2020

Section 7: Supplemental/Supporting Documentation:							

LIBRARY RESOURCES, page 1 of 2 Revised April 2008

Date: 8/29/2019

Proposed Course Name and Number: PSYS 175 University Experience

Current Lib	rary holdings in	a support of	the course are:	
<u>X</u>	adequate		inadequate*	
	library resourc	es not neede	d for course**	
* Inadequate library support ma	will NOT delay terials may still			ıal

- ** Library is not responsible for supporting course if this option is chosen.
- I. Books/Electronic Resources/Other. Please list key titles, whether or not library already owns; attach course reading list, if any; library materials to be placed on reserve; wish list. If reading list not yet compiled, send asap. Attach additional sheet(s) if needed.

Materials Available in Library

 American Psychological Association. (2007). Getting In: A Step-by-Step Plan for Gaining Admission to Graduate School in Psychology. Washington, DC: APA.

Materials Requested to Add

- Dunn, D. S., & Halonen, J. S. (2016). The Psychology Major's Companion: Everything You Need to Know to Get Where You Want to Go. New York: Worth.
- Kuther, T. L. (2019). *The Psychology Major's Handbook, 5th ed.* Los Angeles: Sage. [an older edition of the above can be found on campus at WKU]
- Kuther, T. L., & Morgan, R. D. (2019). Careers in Psychology: Opportunities in a Changing World (5th ed.). Los Angeles: Sage.

II. Key journal titles needed/recommended:

Materials Available in Library

 Journal Access through PSYCInfo, PSYCArticles, and Ebscohost's Psychology and Behavioral Science Collection

LIBRARY RESOURCES, page 2 of 2

Please submit tentative course proposal to Liaison Librarian before departmental curriculum committee meeting when proposal will be considered. This form will be signed and returned to proponent within three working days.

Find Your Liaison Librarian: http://www.wku.edu/Library/dlps/lia_dept.htm

Questions or problems?

Contact Jack Montgomery, jack.montgomery@wku.edu Coordinator, Collection Services Or UCC Library Representative http://www.wku.edu/ucc/guidelines.html

Digitally signed by Andrew Mienaltowski Dh. cn. Andrew Mienaltowski Dh. cn. Andrew Mienaltowski, owelesten Kentucky 'University, owell-special Science's, email-admissipation, actual country of the Coun

Faculty Member Proposing Course

Coordinator, Collection Services