MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Jack Rudolph	Dr. James Gary	Dr. Keith Andrew
Dr. Martin Stone	Dr. Huanjing Wang	Dr. Edward Kintzel
Dr. Greg Arbuckle	Dr. Julie Ellis	Dr. Kelly Madole
Dr. Mark Revels	Dr. Warren Campbell	Dr. Steve Haggbloom
Dr. Bruce Schulte	Dr. David Keeling	Dr. Les Pesterfield
Dr. Phil Lienesch	Dr. Xingang Fan	
Dr. Cathleen Webb	Dr. Bruce Kessler	
Dr. Hemali Rathnayake	Dr. Richard Schugart	

FROM: Kenneth Crawford, Chair

SUBJECT: Agenda for <u>Tuesday, September 30, 2014</u>, 4:00 p.m. in COHH 4123

A. OLD BUSINESS:

    I.   Consideration of the minutes of the September 4, 2014 meeting.

B. NEW BUSINESS:

<u>Information Items</u>

<u>Department of Psychological Sciences</u>

    I. Proposal to Approve a Course in the Colonnade Connections Category
        a. PSYS 350, Introduction to Social Psychology, 3 hrs.

<u>Consent Items</u>

<u>Department of Mathematics</u>

    I. Proposal to Revise Course Prerequisites/Corequisites
        a. MATH 308, Rational Numbers and Data Analysis for Teachers, 3 hrs.
        b. MATH 421, Problem Solving for Secondary Teachers, 3 hrs.
        c. MATH 490, Seminar in Middle Grades Mathematics, 1 hr.

<u>Department of Psychological Sciences</u>

    I. Proposal to Revise Course Prerequisites/Corequisites
        a. PSYS 462, Neurosciences of Learning and Memory, 3 hrs.

<u>Action Items</u>

<u>Department of Agriculture</u>

    I. Proposal to Revise a Program
        a. Ref. 508, Major in Agriculture, Agronomy-Plant Science Conc., 60 hrs.

<u>Department of Architectural and Manufacturing Sciences</u>

    I. Proposal to Make Multiple Revisions to a Course

       a. AMS 394, Lean Manufacturing, 3 hrs.

Department of Computer Science
    I. Proposal to Revise a Program
       a. Ref. 629, Major in Computer Science, Systems/Scientific App. Conc., 47 hrs.

Department of Psychological Sciences
    I. Proposal to Create a New Minor Program
       a. Minor in Psychological Science, 19 hrs.

C. OTHER BUSINESS

MEMBERS PRESENT:

Dr. Greg Arbuckle   Dr. Phil Lienesch for Bruce Schulte
Dr. Hemali Rathnayake   Dr. James Gary
Dr. Huanjing Wang   Dr. Julie Ellis
Dr. Warren Campbell   Dr. David Keeling
Dr. Xingang Fan   Dr. Richard Schugart

FROM: Ken Crawford, Chair

OLD BUSINESS:
Keeling/Campbell moved for approval of the minutes from the May 1, 2014 meeting. Motion passed.

NEW BUSINESS:

Consent Agenda
Arbuckle/Keeling moved for approval to move AMS consent items I and II to action items. Motion passed.

Keeling/Gary moved to bundle and approve the remaining consent items. Motion passed.

Action Agenda

Department of Architectural and Manufacturing Science
Keeling/Campbell moved approval of AMS consent items I and II that were moved to action items with suggested changes. Motion passed.

Keeling/Campbell moved for approval of AMS action item I. Motion passed.

Department of Computer Science
Keeling/Campbell moved for approval of item I. Motion passed.

Department of Geography and Geology
Arbuckle/Campbell moved to bundle and approve items A & C. Motion passed
Campbell/Arbuckle moved to approve item B. Motion passed.
Arbuckle/Campbell moved to approve item D. Motion passed
Arbuckle/Campbell moved to approve item E. Motion passed

OTHER BUSINESS:

No other business.

Meeting was adjourned at 4:20pm.

Colonnade Program Course Proposal: Connections Category

Connections: Understanding Individual and Social Responsibility

Connections courses direct students to apply and integrate discipline-specific knowledge and skills to the significant issues challenging our individual and shared responsibility as global citizens. Students will learn to analyze and evaluate cultural contexts, examine issues on both a local and global scale, and apply system-level approaches to the stewardship of our social and physical environments. Although they may be used with a major or minor program, *Connections* courses are classes at the 200-level or above designed for the general student population, and may be taken *only after* students have earned at least 21 hours in **WKU Colonnade Program** coursework or have achieved junior status. *Connections* courses may not have graduate components or prerequisites other than approved courses within the **WKU Colonnade Program**.

Proposed courses must be designed to address specifically the goals and outcomes of <u>one</u> (1) of the subcategories listed below. Students will take one course from each of the three following areas, selecting three different disciplines (usually defined by course prefixes).

- **Social and Cultural** (3 hours)
  Students will investigate ways in which individuals shape, and are shaped by, the societies and cultures within which they live. Courses will consider the ethical questions and shared cultural values that shape societal norms and behaviors, the independent and collective or collaborative artistic expression of those values, and/or the role of social and cultural institutions in developing and sustaining norms, values, and beliefs.
    1. Analyze the development of self in relation to others and society.
    2. Examine diverse values that form civically engaged and informed members of society.
    3. Evaluate solutions to real-world social and cultural problems.

- **Local to Global** (3 hours)
  Students will examine local and global issues within the context of an increasingly interconnected world. Courses will consider the origins and dynamics of a global society, the significance of local phenomena on a global scale, and/or material, cultural, and ethical challenges in today's world.
    1. Analyze issues on local and global scales.
    2. Examine the local and global interrelationships of one or more issues.
    3. Evaluate the consequences of decision-making on local and global scales.

- **Systems** (3 hours)
  Students will examine systems, whether natural or human, by breaking them down into their component parts or processes and seeing how these parts interact. Courses will consider the evolution and dynamics of a particular system or systems and the application of system-level thinking.
    1. Analyze how systems evolve.
    2. Compare the study of individual components to the analysis of entire systems.
    3. Evaluate how system-level thinking informs decision-making, public policy, and/or the sustainability of the system itself.

***NOTE: The **Colonnade Program** is designed to incrementally build student skills in argumentation and the use of evidence beginning with discipline-specific coursework in the *Foundations* and *Explorations* categories. By extension, *Connections* courses are intended to be summative learning experiences in which students apply basic knowledge to larger and more complex social, global and systemic issues of concern. Proposals should address this summative purpose in the design of the course and the assessment of student learning.

Please complete the following and return electronically to <u>colonnadeplan@wku.edu</u>.

1. What course does the department plan to offer in *Connections*? Which subcategory are you proposing for this course? (Social and Cultural, Local to Global, Systems)
   Social Psychology, PSYS 350. This course fits into the Social and Cultural Category.

2. How will this course meet the specific learning objectives of the appropriate sub-category? Please address **all** of the learning outcomes listed for the appropriate subcategory.

Learning Objective	How Social Psychology meets this:
Students will investigate ways in which individuals shape, and are shaped by, the societies and cultures within which they live. Courses will consider the ethical questions and shared cultural values that shape societal norms and behaviors, the independent and collective or collaborative artistic expression of those values, and/or the role of social and cultural institutions in developing and sustaining norms, values, and beliefs.	These objectives are some of the same objectives that scientific social psychology has. For instance, students will learn about persuasion and prejudice reduction (individuals shaping society), compliance, obedience, and the impact of culture on the self (individuals shaped by society and culture), and how these processes are controlled by social situations that individuals experience and create. Regarding ethics and norms, social psychology examines how ethical behavior generally is a function of situational factors, other than will-power, and directly addresses norms in covering such topics as compliance and relationships. Resistance to social influence also features as a module component in the course.
1. Analyze the development of self in relation to others and society.	As one example of how this course addresses this goal, students will learn how the self-concept, self-esteem, and self-efficacy all exist in transactional relationship with their social environment. They will learn that who we think we are often is more a function of the roles we fill and the expectations others have for us than of who we actually may be. Some of the other ways that social psychology addresses this particular goal occur while covering topics of social influence, prejudice and discrimination, relationships, and aggression.
2. Examine diverse values that form	Students will learn better how to

civically engaged and informed members of society.	understand others' personal, social, and cultural perspectives. They will learn, for instance, the conditions under which inter-group negotiations are most likely to lead to conflict. They also will learn how different conceptualizations of the self, and how differential activation of diverse goals, impact people's interpreted reality. Social psychology goes beyond the seeming differences between people to understand some of the common processes that make us human. By understanding these, differences in values and culture become less threatening. Educated and engaged citizens rely on the best representation of social reality available in order to manage and mold this reality to our benefit. Social psychology provides an empirically-based model of how the social world really works. It strips away value judgments to focus on what it is, essentially, that creates our social existence. Social psychology thus provides a highly critical examination of how values drive civic behavior. The end effect of this course is that it equips students to operate in a world of diverse (but psychologically predictable) values that otherwise might have been seen as morally questionable.
3. Evaluate solutions to real-world social and cultural problems.	Social psychology has a tradition of social problem solving, ranging from addressing intergroup conflict to increasing medical treatment compliance. Students will learn such things as how soap operas can be used to increase condom usage, the conditions under which intergroup contact most effectively facilitates good relationships, how values such as materialism are damaging to mental health, how the use of weapons such as Predator drones increases the willingness of the operator to kill, but may increase his or her post killing discomfort, when alcohol consumption causes aggression (vs. helpfulness), why riots occur, and

	much more. For all of these topics, the understandings gained lend much clarity for how to best solve these problems. After taking this course, students evaluate solutions first based on their knowledge of empirically supported psychological principles, and secondly, based on the expectation that outcomes must be measured and evaluated in order to render judgment.

3. In addition to meeting the posted learning outcomes, how does this course contribute uniquely to the *Connections* category (i.e., why should <u>this course</u> be in Colonnade)? Discuss in detail.

Social psychology combines an appreciation of the complexity of social life with the demand that simplifying assumptions about this complexity be empirically tested. These empirical tests overwhelmingly show that diverse, superficially-different behaviors can be decomposed and understood using basic psychological principles. This course is an extended exercise in the application of these principles to the individual and cultural vagaries of our human experience.

There are few other disciplines that so aggressively apply the scientific method to discover and explain the basic psychological phenomena that make up our common humanity. Students in social psychology are given the means and practice to make sense of their world in a way supported by facts, not supposition or superstition. Social psychology is a course that most students report being very helpful to them in understanding the world.

To put this into the language of the connections course requirements, in order to pass this course, students must apply and integrate their discipline-specific knowledge to address both the daily challenges we all face and to start to gain a better understanding of the larger issues in our world: prejudice; what is love; is there such a thing as altruism; why don't we all get along? These are all topics that this course addresses.

4. Please identify any prerequisites for this course. NOTE: Any prerequisites MUST be *Colonnade Foundations* or *Explorations* courses.

PSYS 100

5. Syllabus statement of learning outcomes for the course. NOTE: In multi-section courses, the same statement of learning outcomes must appear on every section's syllabus.

This course is an introduction to social psychology. This course provides familiarity with the major areas of study within Social Psychology, and the central questions or issues in each of these areas.

It is also a Connections course under the Colonnade Plan. It is designed to meet and exceed the requirements for learning objectives under the Colonnade Plan. In this course, we will:

1. Analyze the development of self in relation to others and society.
2. Examine diverse values that form civically engaged and informed members of society.
3. Evaluate solutions to real-world social and cultural problems.

More concretely, we will gain abilities to understand how the situations we are in cause us to think and act. Instead of seeing behavior as caused solely by a person's personality, we will learn how the situation works in combination with personality to make people do the things that they do.

We also will practice using our new knowledge of social psychology to critically interpret and offer new perspectives on the world around us.

These new abilities will allow us new insight into the nature of our lives, and allow us a more accurate understanding of within and cross-cultural differences in behavior. Understanding the psychological principles at work behind behavior makes it obvious that we as humans share far more similarities than differences. It also helps to clarify how we can work with others, all over the world, to achieve the basic goals and needs that all people have.

One important goal of this course is to provide the opportunity to become better critical thinkers capable of uncommon insight into human behavior.

6. Give a brief description of how the department will assess the course beyond student grades for these learning objectives.

   Student grades reference the individual student's achievement on course assignments. The performance of the class as a whole on the course assignments gives information about learning objective achievement. For instance, quizzes tap into the topics above that are congruent with learning objectives for the course. As such, the quizzes will be part of the assessment of learning objectives.

   In this course, students provide written responses to reading assignments. The readings are chosen to reflect issues of scientific and social interest. On reading response writing assignments, students are evaluated according to how well they understand the readings and their identification and description of the author's assumption(s) (learning objective 2). They also, among other parts of the reading response assignments, describe the implications of the reading for both themselves and others (learning objectives 1 and 3). As such, writing responses to these readings in general reflect the goals of learning objective 3.

In order to assess the learning objectives for the course, all students enrolled in Social Psychology (PSYS 350) will complete a standardized assessment including 10 items. These items will be constructed such that two items will represent each learning objective. The assessment items will be drawn from the course material (as outlined in the course learning outcomes) that is covered during lecture and in the course readings, discussion, and activities. We will randomly sample 50 students who are enrolled in PSYS 350 per calendar year to examine student performance on the 10 items. The following criteria will be used to assess the students' mastery of the learning objectives in the course.

- Excellent = at least 70% of the students answered 9 out of the 10 assessment items correctly
- Good = at least 70% of the students answered 7 out of the 10 assessment items correctly
- Satisfactory = at least 50% of the students answered 7 out of the 10 assessment items correctly
- Unsatisfactory= under 50% of students answered 7 of 10 assessment items correctly.

7. Please discuss how this course will provide a summative learning experience for students in the development of skills in argumentation and use of evidence.

   Learning about research is in many ways learning about the validity of different kinds of evidence. The new research content that students learn about will build on their existing understanding to encourage a more sophisticated interaction with their worlds. Students will hone their argumentation skills in particular by completing a series of reading response assignments, each focused on a different reading, and answering persuasively a number of questions designed to spur critical thinking and address learning objectives. Repeated practice over the course of the semester provides for nearly inevitable improvement and growth (summative learning).

8. How many sections of this course will your department offer each semester?

At least 1 large (60-70 students) section.

9. Please attach sample syllabus for the course. PLEASE BE SURE THE PROPOSAL FORM AND THE SYLLABUS ARE IN THE SAME DOCUMENT.

   Syllabus begins on next page.

<div align="center">

Syllabus
Introduction to Social Psychology – PSYS 350

Please expect changes to this syllabus. These changes will be announced in class.

</div>

| Instructor: Aaron Wichman, Ph.D | Office: GRH 3013 | Office hours: Mon/Wed 8:30- |
| Email: wichmana@gmail.com | Phone: 745-2443 | 11:20 & by appointment |

(Please include "PSY 350" in the subject line of all emails to me to help me respond to you more quickly.)

<u>Course Objectives</u>

This course is an introduction to social psychology. This course provides familiarity with the major areas of study within Social Psychology, and the central questions or issues in each of these areas.

It is also a Connections course under the Colonnade Plan. It is designed to meet and exceed the requirements for learning objectives under the Colonnade Plan. In this course, we will:

4. Analyze the development of self in relation to others and society.
5. Examine diverse values that form civically engaged and informed members of society.
6. Evaluate solutions to real-world social and cultural problems.

More concretely, we will gain abilities to understand how the situations we are in cause us to think and act. Instead of seeing behavior as caused solely by a person's personality, we will learn how the situation works in combination with personality to make people do the things that they do.

We also will practice using our new knowledge of social psychology to critically interpret and offer new perspectives on the world around us.

These new abilities will allow us new insight into the nature of our lives, and allow us a more accurate understanding of within and cross-cultural differences in behavior. Understanding the psychological principles at work behind behavior makes it obvious that we as humans share far more similarities than differences. It also helps to clarify how we can work with others, all over the world, to achieve the basic goals and needs that all people have.

One important goal of this course is to provide the opportunity to become better critical thinkers capable of uncommon insight into human behavior. I urge you to seize this opportunity, so you can better become the person you want to be.

<u>Textbook</u>
Gilovich, T., Keltner, D., Chen, S., & Nisbett, R. E. (2012). *Social Psychology*, 3rd ed., New York. W. W. Norton & Company.
ISBN: 978-0393932584

<u>Additional Readings will be Posted on Blackboard:</u>

Grades:

   Our grades will be based on quizzes, discussion contributions, a final paper, and participation.

   6 Quizzes: 100 points each
   Critical Thinking Article Reaction Responses: 150 points (25 points each)
   Social Cognition Reflection Assignment: 100
   Final Paper: 100
   Final Exam: 100
   Participation: 50 points

   Total points are 1100 for the course.

   All article reaction responses are due on our Blackboard course site by the beginning of class on the day indicated in our course schedule.

By the 2nd week of class, please complete the plagiarism tutorial on the following site: <u>https://www.indiana.edu/~istd/</u> This will be worth 25 of your 50 participation points. The remaining participation points will be awarded based on your participation and your completion of various short written assignments that I will intermittently give you.
Print out the confirmation certificate to bring to class for the first portion (25 points) of your participation grade.

Completion of Coursework

Any assignment that is missed will receive a zero.

Make-up assignments will not be given. An exception may be granted to a student who provides a validated excuse to me <u>prior</u> to the due date. If you realize that something may keep you from attending on the day an assignment is due, contact me immediately.

Incompletes will not be given. If you are unable to complete the course assignments, it is best for you to drop the course.

Make your travel arrangements to allow you to take the final exam. You will receive a zero if you miss it. Final exam is **XXXXX**

No extra-credit assignments will be given.
Please be on time for class, and especially on quiz days. If you arrive in class after the first person has finished with their quiz, I will be unable to allow you to take the quiz. I want you to succeed, so please don't be late!

Article responses will be submitted online, using the Assignments feature in Blackboard. When you submit an article response assignment, please first open a text document and put the assignment prompts (the instructions) in it. Then, type in your response under the appropriate portions of the assignment prompts. Save this document and keep it for your records. Copy and paste the text of your response into the assignment box in Blackboard in order to submit your work. This copied and pasted text then will be graded. You should not attach any files to the assignment—just paste your work into the assignment box. I am unable to give you credit unless you paste your work into the assignment box. The article response assignment instructions may be slightly different from article to article. They are given under each article response assignment posted on Blackboard.

Final Paper:
Due the last regular class period before our final exam.

Paper: In 1,400 words or less, please describe an incident relevant to social psychology that you experienced or witnessed. Indicate the number of words at the top of the paper.

      After describing the incident you either witnessed or experienced, explain how four (4) of the course concepts you were exposed to (either in lecture or the book) have helped you better understand the social psychology of this incident. Make sure to clearly explain each concept before describing how it has helped your understanding of social psychology. Underline each concept. Cite your explanations of concepts using the format (Text, p. XX), or (Lecture, Date). Please do not attach a Title Page, Bibliography or Reference Page. This is unnecessary. Instead of quoting, paraphrase. For tips on paraphrasing, you can do a search on Google.com to find a site such as [http://owl.english.purdue.edu/handouts/research/r_paraphr.html]

Your grade will be heavily based on the clarity and completeness of your concept explanations, as well as how persuasively you show that the concepts have helped you better understand the incident. It also will be based on following these directions (i.e. word count, number of underlined concepts, explaining an incident).

RESIST!...the urge to send email, texts or tweets, check Facebook, read the news, or otherwise engage online via your computer or phone during class! Attentional capacity is a limited resource. It is a fact that dividing your attention this way will decrease your learning performance.

Do you want help with this course outside of class??

First, please come to office hours. Beyond this, if you want help with this class, or any other Gen Ed course, there are several places to go. The Learning Center, located in the Academic Advising and Retention Center, DUC A-330, has tutors in most major undergraduate subjects and course levels throughout the week. They also can direct you to one of many tutoring and assistance centers across campus. To make an appointment, or request a tutor for a specific class, call 745-6254 or stop by DUC A330. Log on to TLC's website at http://www.wku.edu/tlc to find out more.

Academic Misconduct:

All work must be your own. Cheating or plagiarism will be reported through official university channels, and the consequences will be severe.

Specific academic misconduct violations include academic dishonesty, cheating, and plagiarism. All exams in this course are to be taken (a) without the use of notes, books, or other additional materials, and (b) without the assistance of any other person or group. Use of electronic devices such as calculators, PDAs, cell phones, or audio devices during exams is not allowed.

You will receive a failing grade in the course if you engage in academic misconduct.

Do not discuss your work in this class with anyone before turning it in, and do not share your work with anyone who has not yet completed the assignment. You should not copy or steal others' work.

In general, to get something out of this course and to avoid any problems like those hinted at above, use your head. This means: pay attention in class, do the assigned readings, and study by thinking about course content as it relates to everyday life. Avoiding plagiarism is easy if you know how. Just paraphrase and cite your sources.

The quizzes, the exam, and the paper are designed for what you can do based on what we are covering in this class and the skills you have already learned. They assume you will do your own work.

> Note: Although we will attempt to closely follow this syllabus, both the schedule and content of topics and assignments are subject to change based on the characteristics of our class. Any changes will be announced in class.
>
> **Disability Services**
> If you have a disability and would like to request accommodation, contact the Office for Student Disability Services in Downing University Center A-200. The phone number is 745-5004; TTY is 745-3030. If you have a disability, you legally are entitled to assistance if you want it. Make sure to contact the office for student disability services before talking to me—this is university policy.

Please know that I care about your success in this course, and I am here to help in any reasonable way that I can.

Last Modified XXXXX

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

Contact Person: Hope Marchionda, hope.marchionda@wku.edu, 5-2961

1.   **Identification of course:**
    1.1   Course prefix (subject area) and number: MATH 308
    1.2   Course title: Rational Numbers and Data Analysis for Teachers

2.   **Current prerequisites/corequisites/special requirements:**
Completion of MATH 206 with a grade of "C" or better; for students in the Early Grades (K-5), Middle Grades (5-9) or SPED Teacher Certification programs only.

3.   **Proposed prerequisites/corequisites/special requirements:**
Completion of MATH 205 with a grade of "C" or better; for students in the Early Grades (K-5), Middle Grades (5-9) or SPED Teacher Certification programs only.

4.   **Rationale for the revision of prerequisites/corequisites/special requirements:**
The content from MATH 205 (number theory and operations) is required for a student to successfully complete MATH 308, whereas the content from MATH 206 (geometry) is not, making MATH 205 a more appropriate prerequisite.

5.   **Effect on completion of major/minor sequence:**
Changing the prerequisite from MATH 206 to MATH 205 will allow students to take MATH 308 in an earlier semester, allowing them to complete their required three-course mathematics sequence in a more timely manner. This change will eliminate a possible graduation delay for students who declare education majors later in their college careers.

6.   **Proposed term for implementation:**
Fall 2015

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

    Mathematics Department   9/19/14
                                             _____

    Ogden College Curriculum Committee   _____

    Professional Education Council   _____

    Undergraduate Curriculum Committee   _____

    University Senate   _____

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

Contact Person: Hope Marchionda, hope.marchionda@wku.edu, 5-2961

1.   Identification of course:
    1.1   Course prefix (subject area) and number: MATH 421
    1.2   Course title: Problem Solving for Secondary Teachers

2.   Current prerequisites/corequisites/special requirements:
MATH 307 and 310 both with grades of "C" or better; or MATH 382 and 323 both with grades of C or better, or permission of instructor.

3.   Proposed prerequisites/corequisites/special requirements:
MATH 307 or 310 with a grade of "C" or better or permission of instructor.

4.   Rationale for the revision of prerequisites/corequisites/special requirements:
MATH 421 does not necessarily draw on specific content from MATH 307 or MATH 310, but rather it relies on a level of mathematical maturity that can be gained by successfully completing either course. In addition, since this course will be offered only once a year, changing the MATH 307 and MATH 310 prerequisite to MATH 307 or MATH 310 will allow students more options for completing their degree program. Additionally, most secondary education majors do not take MATH 382 and many take MATH 323 in their final semester of coursework before student teaching, which does not leave them sufficient time to complete MATH 421. Therefore, the combination of MATH 382 and 323 does not provide an avenue for students to become eligible for the course.

5.   Effect on completion of major/minor sequence:
Revising the current prerequisites will not affect the completion of the major. Instead, it will allow secondary mathematics majors an additional choice for a 400-level mathematics course that is intended for future mathematics teachers. This will further enhance their content preparation without delaying graduation.

6.   Proposed term for implementation:
Spring 2015

7.   Dates of prior committee approvals:

    Mathematics Department   9/19/14
                                                            _____
    Ogden College Curriculum Committee
                                                            _____
    Professional Education Council
                                                            _____
    Undergraduate Curriculum Committee
                                                            _____

University Senate

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

Contact Person: Hope Marchionda, hope.marchionda@wku.edu, 5-2961

1. **Identification of course:**
   1.1   Course prefix (subject area) and number: MATH 490
   1.2   Course title: Seminar in Middle Grades Mathematics

2. **Current prerequisites/corequisites/special requirements:**
Prerequisite /Corequisite: MATH 411.

3. **Proposed prerequisites/corequisites/special requirements:**
Prerequisite: Completion of at least 25 hours of mathematics courses, with grades of C or better, required for the Middle Grades Mathematics Degree. Prerequisite /Corequisite: MATH 411 or MATH 421.

4. **Rationale for the revision of prerequisites/corequisites/special requirements:**
MATH 490 is intended to be a capstone course for the Middle Grade Mathematics Major. Requiring students to complete a substantial portion of their major course work (at least 25 hours) will ensure that they have a sufficient level of content knowledge and mathematical maturity for the course. Students in the Middle Grades Mathematics program must successfully complete either MATH 411 or MATH 421 for their major. Therefore, either course is an acceptable prerequisite.

5. **Effect on completion of major/minor sequence:**
This change could potentially cause a student who declares a Middle Grades Mathematics major later in their academic careers to graduate one semester later.

6. **Proposed term for implementation:**
Spring 2015

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

   Mathematics Department   9/19/14
   _____

   Ogden College Curriculum Committee
   _____

   Professional Education Council
   _____

   Undergraduate Curriculum Committee
   _____

   University Senate
   _____

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

Contact Person: Sharon Mutter, Sharon.mutter@wku.edu, 5-4389

1. **Identification of course:**
    1.1   PSYS 462
    1.2   Course title: Neuroscience of Learning and Memory

2. **Current prerequisites/corequisites/special requirements:** PSYS 331 or PSYS 333, and PSYS 360

3. **Proposed prerequisites/corequisites/special requirements:** PSYS 331, or PSYS 333, or PSYS 360, or permission of the instructor

4. **Rationale for the revision of prerequisites/corequisites/special requirements:** Successful performance in this class does not require a background in PSYS 360.

5. **Effect on completion of major/minor sequence:** None

6. **Proposed term for implementation:** Spring 2015

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

    Department of Psychological Science   **9/5/2014**

    OCSE Graduate Curriculum Committee   _____

    Graduate Council   _____

    University Senate   _____

Proposal Date: September 23, 2014

Ogden College of Science and Engineering
Department of Agriculture
Proposal to Revise A Program
(Action Item)

Contact Person: Todd Willian, todd.willian@wkul.edu, (270) 745-5969

1. **Identification of program:**
    1.1   Current program reference number: 508
    1.2   Current program title: Major in Agriculture, Agronomy-Plant Science Concentration
    1.3   Credit hours: 60

2. **Identification of the proposed program changes:**
    - Reduce number of required hours from 60 to 52
    - Add AGRO 317 and AGEC 391 to subcategory 2
    - Add AGRI 315, AGRO 457 and AGRO 458 to subcategory 3
    - Delete AGEC 362, AGRO 455/456 and AGRO 475 from subcategory 3
    - Move AGRI 398 courses from subcategory 4 to subcategory 1
    - Move AGRO 351 from subcategory 2 to subcategory 4
    - Add a 1 hour laboratory (AGRO 111) to subcategory 4

3. **Detailed program description:**

    (Side-by-side table is required for most program changes showing revised program on the right and identifying deletions by strike-through and additions in boldface.)
    - See attached document

4. **Rationale for the proposed program change:**
    - These revisions will allow program requirements listed in ICAP and those listed in the catalog to match, thus eliminating the need for ICAP Exception Appeal Form submissions.
    - Moving AGRI 398 courses to subcategory 1 accurately reflects the 29 hours of required core agriculture courses.
    - Additions to and deletions from subcategories 2 and 3 are based upon conversations with numerous agronomic industry personnel. These changes will better prepare students for careers in crop science.

5. **Proposed term for implementation and special provisions (if applicable): Fall 2015**

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

Department/ Unit   September 18, 2014 _____

College Curriculum Committee   _____

Professional Education Council (if applicable)   _____

Undergraduate Curriculum Committee   _____

University Senate   _____

Old iCap	Revisions
1. Take the following required basic agriculture courses: Select From: AGRI 108 AGRO 110 ANSC 140 AGMC 170 AGMC 171 AGRI 291 AGRO 320 AGRO 350 AGEC 360 AGRI 494 Needs: 27 hours	1. The following 29 hours of basic agriculture courses are required: AGRO 110 (3 credit hours) ANSC 140 (3) AGMC 170/171 (3) AGRI 108 (3) AGRI 291 (3) AGRO 320 (3) AGRO 350 (3) AGEC 360 (3) **AGRI 398-001 (1)** **AGRI 398-002 (1)** AGRI 494 (3)
2. Take the following courses from the Agronomy-Plant Science concentration: Needs 22 hours Select from: AGRO 310 ~~AGRO 351~~ AGRO 352 AGEC 361 AGRO 409 AGRO 410 AGRO 414 AGRO 420 AGRO 421 AGRO 422	2. Select 18 credit hours from the following courses for the Agronomy- Plant Science concentration: AGRO 310 (3) **AGRO 317 (3)** AGRO 352(3) AGEC 361 (3) **AGEC 391 (3)** AGRO 409/410 (3) AGRO 414 (3) AGRO 420/421 (3) AGRO 422 (3)
3. Take three of the following courses. Note: AGRO 455 and 456 must be taken together. Needs: 3 sets Select from: ~~AGEC 362~~ AGRO 452 AGRO 454 ~~AGRO 455~~ ~~AGRO 456~~ ~~AGRO 475~~ AGRI 493	3. Select 3 credit hours from the following courses: **AGRI 315 (3)** AGRO 452 (3) AGRO 454 (3) **AGRO 457/458 (3)** AGRI 493 (3)
4. Take two AGRI 398 courses. Needs: 2 hours Select from: ~~AGRI 398~~	4. The following laboratory courses are required: **AGRO 111 (1)** **AGRO 351 (1)**

Ogden College of Science and Engineering
Architectural and Manufacturing Science Department
Proposal to Make Multiple Revisions to a Course
(Action Item)

Contact Person: Bryan Reaka, bryan.reaka@wku.edu, 270-745-7032

1. **Identification of course:**
   1.1 Current course prefix (subject area) and number: AMS 394
   1.2 Course title: Lean Manufacturing

2. **Revise course title:**
   2.1 Current course title: Lean Manufacturing
   2.2 Proposed course title: Lean Systems
   2.3 Proposed abbreviated title: Lean Systems
   2.4 Rationale for revision of course title: Lean thinking is a concept that cuts across many industries and not just the manufacturing sector.

3. **Revise course number: NA**
   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: NA**
   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: Introduction to the production system and the role of inventory, market characterization aggregate planning, lean manufacturing and the just in time philosophy. (Course Fee)
   5.2 Proposed course catalog listing: Applications of lean systems across disciplines. (Course Fee)
   5.3 Rationale for revision of course catalog listing: Lean philosophy forms the foundation for success in today's industries. This mindset covers more than the manufacturing sector.

6. **Revise course credit hours: NA**
   6.1 Current course credit hours:
   6.2 Proposed course credit hours:
   6.3 Rationale for revision of course credit hours:

7. **Revise grade type: NA**
   7.1   Current grade type:
   7.2   Proposed grade type:
   7.3   Rationale for revision of grade type:

8. **Proposed term for implementation: Spring 2015**

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

   Department: Architectural and Manufacturing Sciences   **9-19-2014**

   Ogden College Curriculum Committee   _____

   Undergraduate Curriculum Committee   _____

   University Senate   _____

Ogden College of Science and Engineering
Department of Computer Science
Proposal to Revise A Program
(Action Item)

Contact Person: Huanjing Wang, huanjing.wang@wku.edu, 745-2672

1.   **Identification of program:**
        1.1   Current program reference number: **629**
        1.2   Current program title: **Major: Computer Science with concentration in Systems/Scientific Applications**
        1.3   Credit hours: **47**

2.   **Identification of the proposed program changes:**
        - Add one course to the list of required core courses
        - Remove one course from the list of additional required courses
        - Change the number of hours in the program from 47 to 50

3.   **Detailed program description:**

Systems/Scientific Applications Concentration	Systems/Scientific Applications Concentration
1. ~~47 hours of computer science courses are required.~~	1. **50 hours are required including 47 hours of computer science courses and 3 hours of STAT 301.**
2. ENG 307, MATH 136, ~~STAT 301~~, and PHIL 215 are required.	2. **ENG 307, MATH 136, and PHIL 215 are required.**
3. Completion of these 11 CS core courses (35 credit hours): CS 180, 181, 251, 280, 325, 360, 380, 382, 396, 425, and 496.	3. Completion of these 11 CS core courses (35 credit hours): CS 180, 181, 251, 280, 325, 360, 380, 382, 396, 425, and 496.
4. Completion of 12 hours of CS electives from the following courses: CS 370, 381, 443, 445, 446, 450, and 456.	4. Completion of 12 hours of CS electives from the following courses: CS 370, 381, 443, 445, 446, 450, and 456.
5. Completion of 2 courses from the following list: MATH 127, 137, 305, 307, 331, 405, 406, 470 and 473.	5. Completion of 2 courses from the following list: MATH 127, 137, 305, 307, 331, 405, 406, 470 and 473.
6. Completion of one year of a laboratory science (a two semester sequence of the same science) and one additional science course (all must be designed for Science/Engineering majors).	6. Completion of one year of a laboratory science (a two semester sequence of the same science) and one additional science course. All must be designed for Science/Engineering majors.
7. One additional course from the above list of MATH courses (this course may not be used to satisfy any other CS major degree requirement) or one additional science course designed for science/engineering	7. One additional course from the above list of MATH courses (this course may not be used to satisfy any other CS major degree requirement) or one additional science

majors.	course designed for science/engineering majors.

4. Rationale for the proposed program change:

STAT 301 is an important course for this option and has been used as a prerequisite for a required upper-division CS course (CS 380). We propose to move STAT 301 from the list of additional required courses to the list of required core courses, thereby increasing the number of hours in the program from 47 to 50. This change will satisfy the University requirements for a major that requires no minor, as was the intent of the original program proposal.

5. Proposed term for implementation and special provisions (if applicable):
Fall 2015

6. Dates of prior committee approvals:

Department of Computer Science	9/16/2014
Ogden College Curriculum Committee	
Undergraduate Curriculum Committee	
University Senate	

Ogden College of Science and Engineering
Department pf Psychological Sciences
Proposal to Create a New Minor Program
(Action Item)

Contact Person: Andrew Mienaltowski, andrew.mienaltowski@wku.edu, (270) 745-2353

1.   **Identification of program:**
  1.1   Program title: Psychological Science
  1.2   Required hours in minor program: 19
  1.3   Special information:
       This minor is being proposed by the Department of Psychological Sciences and draws
       exclusively on courses offered by this department.
  1.4   Catalog description:
       A minor in Psychological Science provides graduates with a broad overview of the
       discipline as well as exposure to the foundations of the discipline. The Psychological
       Science minor focuses students on becoming more engaged and critical consumers of the
       science underlying psychology through courses informed by current research and practice
       in the scientific study of individual and collective behavior, the physical and
       environmental bases of behavior, and the analysis and treatment of behavioral problems.
       The minor requires a minimum of 19 credit hours: 7 from research design and a
       discipline overview, 6 reflecting foundational studies in the discipline, and 6 hours of
       electives. This minor might appeal to students who are in a pre-professional track (e.g.,
       pre-med) or to students majoring in disciplines where psychological science can inform
       research and practice (e.g., biology, computer science, philosophy, religious studies,
       nursing, communication disorders, management, etc.).
  1.5   Classification of Instructional Program Code (CIP): 42.0101

2.   **Rationale:**
  2.1   Reason for developing the proposed minor program:
       In November 2013, the Department of Psychological Sciences was created in the Ogden
       College of Science and Engineering. At the March 2014 University Senate meeting, the
       Bachelor of Science in Psychological Science program was approved. Students who are
       interested in minoring in Psychological Science, however, do not yet have an option
       available to them. The proposed program will enable students who are majoring in other
       disciplines to enrich their knowledge of the science of psychology and their critical
       analysis and reasoning skills by minoring in Psychological Science. This program will be
       particularly valuable to students who are in Pre-Med or Pre-Health programs that require
       completion of the MCAT. Recently, the MCAT was substantially revised with a social
       science focus in mind. This proposal includes curriculum from the Department of
       Psychological Sciences that reflects the psychology-specific content that is relevant to the
       revised MCAT.

       Psychological Science focuses on mental processes and behaviors that are relevant across
       many domains, including business and organizations, health, engineering and industrial
       design, ecology, human development, and neuroscience. WKU does not currently have a
       minor program that integrates the knowledge relative to the curriculum being offered by
       the Department of Psychological Sciences. The knowledge and skills gained from the
       proposed minor will assist students in applying psychological principles to their major

academic program of interest and in becoming a more critical consumer of psychological research.

2.2 Projected enrollment in the proposed minor program:
We anticipate that enrollment in this program will grow to approximately 25-30 students per academic cohort (e.g., freshmen, sophomore, etc.) and may appeal most to pre-professional students.

2.3 Relationship of the proposed minor program to other programs now offered by the department:
No other minor is currently offered by the department.

2.4 Relationship of the proposed minor program to other university programs:
The Department of Psychology in the College of Education and Behavioral Sciences offers a minor in Psychology. However the proposed program differs from that minor in several substantial ways:

- Many courses that are most central to the discipline (e.g., Developmental Psychology, Cognitive Psychology, Sensation and Perception, Behavioral Neuroscience) are PSYS courses (taught by faculty in the Department of Psychological Sciences) and therefore are not included in the Psychology minor. Many students in other departments want a minor that will allow them to study these topics (e.g., aging, sexuality, psychopharmacology, judgment and decision making)
- The proposed Psychological Science minor differs from the Psychology minor by implementing course sequencing that will scaffold the student experience in the minor to cover the basics of psychological concepts and research design before completing upper-level courses that require these foundational experiences (see more below).
- The proposed minor will create a program with curriculum that is administratively housed in the Department of Psychological Sciences and will offer courses to students that reflect the research-oriented focus of this new department without adding additional workload for faculty.
- The proposed minor is likely to appeal to students who must take the MCAT for post-baccalaureate professional programs because the psychological content included on this test is covered in depth by Psychological Sciences' courses (e.g., PSYS 360 Behavioral Neuroscience, PSYS 363 Sensation and Perception, PSYS 321 Child Developmental Psychology, and PSYS 423 The Psychology of Adult Life and Aging).

2.5 Similar minor programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions):
The proposed minor is organized in a manner that is similar to those offered by benchmark institutions or other institutions in Kentucky. In general, there are two formats for the minor, one that offers fewer restrictions and one that structures a student's minor experience using psychological foundations courses. The proposed minor falls in the latter category and resembles the minor offered by other institutions.

Institution	Minor Program	Required Minimum Hours	Organization of Program
Appalachian State University	Psychology	18	Intro and 15 elective hours

Ball State University	Psychological Science	18	Intro and 15 elective hours
Bowling Green State University	Psychology	20	None
Central Michigan University	Psychology	21	Intro and 18 elective hours
East Carolina University	Psychology	24	Intro, Cognition or Learning, a Biological Basis of Behavior course, two psychological foundations courses (e.g., Developmental, Social, Personality, Abnormal, or Testing), and 9 elective hours
East Tennessee State University	Psychology	18	Intro, two psychological foundations courses (e.g., developmental or social psych), and 9 upper-level elective hours
Florida Atlantic University	Psychology	15	Intro, Developmental, Cognition, Biological Bases of Behavior, and Social Psych
Illinois State University	Psychology	21	Intro, Methods, Statistics, Personality, and 9 elective hours (6 of which must be upper-level hours)
Indiana State University	Psychology	18	Intro, Methods, and 12 elective hours (as closely related to student's major as possible)
Middle Tennessee State University	Psychology	15	Intro and 12 elective hours
Northern Illinois University	Psychology	21	Intro and 18 elective hours (12 of which must be upper-level hours)
Ohio University	Psychology	21	Intro, Statistics, three courses in psychological foundations (e.g., physio, cognitive, developmental, social, and abnormal psych), and 6 upper-level elective hours
Towson University	Psychology	26	Intro, Developmental, Methods, Statistics, and 12 hours covering 4 major topic areas
University of North Carolina - Charlotte	Psychology	18	Intro, three courses in psychological foundations (e.g., learning and cognition, biological psych, and developmental psych), and two electives

University of North Carolina - Greensboro	Psychology	18	Intro and 15 elective hours (at least 2 courses at 200-level, one at 400 level, and any two additional electives)
University of South Alabama	Psychology	21	Intro, Methods, and 15 elective hours (12 of which must be upper-level hours)
University of Southern Mississippi	Psychology	21	Intro and 18 elective hours (but not field work, special problems, advanced methods, or thesis hours)
Eastern Kentucky University	Psychology	18	Intro and 18 elective hours
Kentucky State University	Psychology	18	Intro, Methods, Stats, Developmental, Abnormal, Personality Psych and 6 upper-level elective hours
Morehead State University	Psychology	24	Intro and 21 elective hours
Murray State University	Psychology	21	Intro and 18 elective hours
Northern Kentucky University	Psychological Science	24	Intro and 21 elective hours
University of Kentucky	Psychology	19	Intro, Methods, and select from psychological foundations courses (Learning and Cognition, Development, Brain and Behavior, Personality, and Social Psych)
University of Louisville	Psychology	21	Intro, Methods, Stats, select from psychological foundations courses (e.g., Learning, Cognition, Physiological Psych, Development, Social, and Abnormal Psych), and 1 elective

2.6 Relationship of the proposed minor program to the university mission and objectives: WKU's Mission Statement states that "Western Kentucky University prepares students of all backgrounds to be productive, engaged, and socially responsible citizen-leaders of a global society." The proposed minor program contributes to WKU's mission by offering students an opportunity to complete coursework that focuses on the scientific study of the mind, the brain, and behavior. Having a deeper understanding of the nature of cognitive and perceptual processes, of the impact that social contexts have on thought and behavior, of the trajectory of human development in psychological processes, and of the implications that psychopathology and psychopharmacology have for our everyday existence will better enable those students who minor in Psychological Science to be productive, engaged, and socially responsible citizen-leaders.

In the WKU Challenging the Spirit Action Plan (2012-2018), the first strategic goal that is listed is to foster academic excellence by (a) extending the engaged learning and global

dimensions of the WKU academic experience, and (b) reinforcing WKU as a destination of choice for stakeholder in higher education (i.e., students, faculty, and staff). The proposed program will increase the number of opportunities that WKU students and faculty have to interact to discuss human thought and behavior and to become engaged in high quality, engaging, and international scholarship in psychological science. The faculty members in the Department of Psychological Sciences are actively engaged in peer-reviewed scholarship, publish in national and international journals, pursue research funding opportunities, and actively engage students in every step of the scientific method as it applies to the discipline. The proposed minor will expand WKU's offerings within STEM disciplines and should appeal to students who are interested in the intersection between the traditional physical and natural sciences and human thought and behavior. Additionally, the program may appeal to students outside of STEM disciplines who are interested in learning more about the scientific techniques used to capture individual differences in human thought and behavior, as these differences are vital to the human experience and inform disciplines like marketing, management, communications, and literature.

3. **Learning outcomes of the proposed minor:**
    Consistent with the goals specified by the American Psychological Association for undergraduate programs, while completing the minor requirements, students will:
    - Develop and apply a knowledge base in psychology that includes research design and content in the foundational areas of the discipline (i.e., learning and cognition, human development, physiological psychology, and sociocultural influences)
    - Engage in critical scientific inquiry by using scientific reasoning to interpret data and conclusions drawn from data, by recognizing limitations in research design and implementation, and by discussing the implications that individual differences in sociocultural factors have in measuring psychological constructs
    - Examine the ethical standards and social consequences of psychological research on the everyday lives of individuals from diverse backgrounds and at different stages of the life span
    - Communicate the science of the discipline through written and oral forms of expression
    - Reflect on the roles that the knowledge base and scientific reasoning skills developed in the program play in their professional development as responsible citizens and scholars

4. **Curriculum:**
    The minor in Psychological Science requires a minimum of 19 credit hours. Only six of these hours can be duplicated (e.g., PSYS 100 Colonnade Program or PSYS 423 in Gerontology minor).

    The following courses (7 credits) are required for the minor:
    - PSYS 100 Introduction to Psychology (3 credits)
    - PSYS 210 Research Methods (3 credits)
    - PSYS 211 Research Methods Lab (1 credit)

    Category A (Individual Differences and Developmental Processes): Select at least one of the following courses (3 credits):
    - PSYS 321 Child Developmental Psychology (3 credits)
    - PSYS 350 Social Psychology (3 credits)
    - PSYS 423 Psychology of Adult Life and Aging (3 credits)
    - PSYS 440 Abnormal Psychology (3 credits)

Category B (Learning, Cognition, and Biopsychology): Select at least one of the following courses (3 credits):

- PSYS 331 Psychology of Learning (3 credits)
- PSYS 333 Cognitive Psychology (3 credits)
- PSYS 360 Behavioral Neuroscience (3 credits)
- PSYS 363 Sensory and Perceptual Systems (3 credits)

Six additional upper-level credit hours of PSYS courses are required. These hours can include the above restricted elective courses that were not taken to meet the Category A and Category B requirements, and can include no more than 3 credit hours of PSYS 490.

5.   **Budget implications:** The newly created Department of Psychological Sciences has 17 full-time faculty and three faculty who are assigned to the department on a part-time basis for teaching. There should be no budgetary implications as the faculty teaching for Psychological Sciences will continue to teach the courses that they are already teaching to meet the minor's requirements, as these requirements overlap completely with the Psychological Science BS program. We are interested in growing enrollment in our student programs and we have the faculty to do this. The Department of Psychological Sciences was created in the Ogden College of Science and Engineering by the unanimous vote of the WKU Board of Regents (October 23, 2013, Action Item 1.3) to allow for growth in undergraduate and graduate academic programs at WKU. The proposed minor allows the faculty in the new department to offer a new program to students that aligns with the mission of the Ogden College of Science and Engineering within the field of psychology using courses that already exist and are taught by Psychological Sciences faculty in the Ogden College of Science and Engineering.

6.   **Proposed term for implementation: Spring 2015**

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

Department of Psychological Sciences	**9/5/2014**
Ogden College of Science & Engineering Curriculum Committee	
Undergraduate Curriculum Committee	
University Senate	
Board of Regents	