

# Summary of Proposed Curriculum Revisions

Ouachita Baptist University  
October 2022

The faculty **approved** these curriculum revisions at a faculty meeting on October 11, 2022.

[Natural Sciences](#) | [Social Sciences](#)

The **short form** notation indicates informational level curriculum revisions submitted on the Curriculum and Academic Standards Committee's short form, which addresses course title changes, course time offering changes, and non-substantive changes to course content and/or descriptions. These short form revisions will NOT be brought to the faculty for discussion or a vote, unless questions are raised before the faculty meeting.

## Natural Sciences

Physics	Proposed Changes
	<ul style="list-style-type: none"><li>• <b>Add a new Bachelor of Science in Engineering Degree (B.S.)</b> for General Engineering, with three emphases: General, Mechanical, and Civil;</li><li>• <b>Add a new prefix, ENGR,</b> for the new engineering degree courses;</li><li>• <b>Add the following new courses:</b><ul style="list-style-type: none"><li>• ENGR 2XX2 Introduction to Engineering Laboratory for Fall;</li><li>• ENGR 2xx1-2xx4 Special Topics in Engineering for On Demand;</li><li>• ENGR 3xx3 Fluid Mechanics for Fall;</li><li>• ENGR 3xx4 Engineering Materials for Spring;</li><li>• ENGR 3xx3 Numerical Methods for Fall of even-numbered years;</li><li>• ENGR 3XX3 Heat Transfer for Spring;</li><li>• ENGR 3XX3 Transportation for Spring of odd-numbered years;</li><li>• ENGR 3xx3 Introduction to Geotechnical Engineering for Spring of even-numbered years;</li><li>• ENGR 3xx1-3xx2 Internship for On Demand;</li><li>• ENGR 4xx1 Engineering Capstone I for Fall;</li><li>• ENGR 4xx3 Engineering Capstone II for Spring;</li><li>• ENGR 4xx1 Engineering Proficiency for Fall;</li><li>• ENGR 4XX3 Mechanical Element Design for Fall;</li><li>• ENGR 4xx3 Mechanical Design Control for Spring;</li><li>• ENGR 4xx3 Heating, Ventilation, and Air Conditioning for Fall;</li><li>• ENGR 4XX3 Water Resources for Fall;</li><li>• ENGR 4xx3 Structural Analysis and Design for Fall;</li><li>• ENGR 4xx1-4xx3 Individual Study, Group Study, Research for On Demand;</li><li>• ENGR 4xx1-4xx2 Laboratory Peer Instructor for On Demand;</li></ul></li></ul>

- **Move the following courses from PHYS to the ENGR prefix** (These classes will remain cross listed for the next three years and have the same descriptions and time offerings in PHYS and ENGR. Courses with an asterisk (\*) have new or modified descriptions in PHYS.):
  - ENGR 1123 Introduction to Physics & Engineering\*;
  - ENGR 1112 Engineering Graphics;
  - ENGR 2123 Statics;
  - ENGR 2133 Dynamics;
  - ENGR 3xx4 Electrical Circuits\*;
  - ENGR 3xx3 Thermodynamics\*;
  - ENGR 3203 Strength of Materials.

### **Rationale**

The rationale for creating this new engineering degree and degree program is to meet the current engineering needs in our region, as well as the requests of current and prospective students. While our engineering physics degree has done a great job of preparing students to be engineers, more and more companies and students are looking for an ABET-accredited engineering degree. This proposal is the culmination of 4 years of research and exploratory work into offering an official ABET engineering program at Ouachita. The need for properly trained engineers continues to grow and shows continued need for many years to come. We are proposing a general engineering degree to provide a good foundation and overall framework for engineering students. In addition, our proposal contains two specific areas of engineering for students who want additional training in one of these areas. This is possible because: (1) Mechanical and Civil share a lot of similar courses so we are able to use some new courses in both areas. (2) Mechanical and Civil are the two most needed/requested engineering positions in Arkansas, especially southern Arkansas. We are not able to offer a full set of courses for a complete Mechanical or Civil degree at this time, so we are offering a targeted set of courses that will still help our students succeed in the industry or if they choose to pursue a Professional Engineering License. If a student can't decide between either mechanical or civil, they can take a varied slate of courses from each area and graduate with a General Emphases.

### **Catalog Entry**

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#### **Engineering (ENGR)**

Engineering is the application of science and mathematics to solve unique problems. Engineering has matured and expanded over the centuries along with our knowledge and understanding of science, mathematics and the laws of physics and their applications. Today, engineers apply both well-established scientific principles and cutting-edge innovations to design, build, improve, operate and maintain complex devices, structures, systems and processes. Engineers work in many different settings, including research laboratories, factories, construction sites, nuclear power plants, and offshore oil rigs. Additionally, many engineers work in businesses related to their areas of specialization; for example, an HVAC (heating, ventilation and air conditioning) engineer might own a heating and air conditioning company, and a structural engineer might own a construction company.

Ouachita offers a degree in General Engineering as we seek ABET accreditation, which will provide a student with a solid foundation in engineering principles. We also offer two areas of emphasis with the General Engineering degree, Mechanical and Civil, for students pursuing an engineering career in one of those specific areas. Mechanical engineering involves the design, manufacturing, inspection and maintenance of machinery, equipment and components as well as control systems and instruments for monitoring their status and performance, whereas Civil engineering involves the

design, construction, maintenance and inspection of large infrastructure projects.

The best prepared students seeking a B.S. degree in General Engineering will be ready for at least Pre-Calculus as an entering freshman, as well as having any additional college course credits (such as Composition I), to aid in the scheduling process.

**Engineering CORE (28 hours):**

ENGR 1123, 1112, 2aa2, 2123, 2133, 3aa4, 3aa3, 3cc3, 4aa1, 4bb3, 4bb1

**Requirements for a B.S. in General Engineering:**

PHYS 2054, 2064, 3004, 3ab3 or 4043, 4003; Engineering CORE plus twenty-two additional approved hours in engineering; CHEM 1004; MATH 2014, 2024, 3034, 3043; ENGL 3013.

**Requirements for a B.S. in General Engineering (Mechanical Emphasis):**

PHYS 2054, 2064, 3004, 3ab3 or 4043, 4003; Engineering CORE plus ENGR 3203, 3bb3, 3bb4, 3dd3, 4gg3, 4cc3, 4dd3; CHEM 1004; MATH 2014, 2024, 3034, 3043; ENGL 3013.

**Requirements for a B.S. in General Engineering (Civil Emphasis):**

PHYS 2054, 2064, 3004, 3ab3 or 4043, 4003; Engineering CORE plus ENGR 3203, 3bb3, 3bb4, 3hh3, 3kk3, 4hh3, 4kk3; CHEM 1004; MATH 2014, 2024, 3034, 3043; ENGL 3013.

**(ENGR) 1123. Introduction to Physics & Engineering.**

Students learn about the transition from secondary to university challenges and expectations. Students are introduced to the Physics and Engineering curricula and professions, to problem-solving and communication tools, to fundamental engineering topics and problems, and to professional ethics. The course will culminate with students completing a technical project and presenting their solutions. **Fall.**

**(ENGR) 2aa2. Introduction to Engineering Laboratory.**

This course introduces students to engineering laboratory tools and processes by providing hands-on opportunities for using the tools to complete engineering-related projects and test procedures. Laboratory three hours per week. **Fall.**

**(ENGR) 2xx1-2xx4. Special Topics in Engineering.**

A course varied to meet the needs of the department. **On Demand**

**(ENGR) 3aa3. Thermodynamics.**

Introduction of fundamental concepts. Units and measures; properties of pure substance, first and second laws of thermodynamics, work, heat, entropy, analysis of various thermodynamic cycles. Prerequisite: PHYS 2064 or PHYS 2034 and MATH 2014. **Spring.**

**(ENGR) 3aa4. Electrical Circuits.**

An introduction to the fundamental concepts of electrical circuits, including circuit variables, elements, and simple resistive circuits; circuit laws and network theorems; op-amps; inductance; capacitance; natural and step responses of RL, RC, and RLC circuits. Lecture three hours, laboratory three hours per week. Prerequisites: Either PHYS 2064 or both PHYS 2034 and MATH 2014. **Fall of odd-numbered years.**

**(ENGR) 3bb3. Fluid Mechanics.**

Properties of fluids and fluid statics; continuity, energy, and impulse-momentum equations; flow in

open and closed conduits; general fluid mechanics and hydrology laboratory experiments; fluid measurements and data analysis. Lecture two hours, laboratory two hours per week. Prerequisites: ENGR 2133, MATH 3034. **Fall.**

**(ENGR) 3bb4. Engineering Materials.**

Basic structure and fundamental mechanical, physical, and electrical properties, as appropriate, in metals, alloys, polymers, ceramics, portland cement concrete, asphalt, and other engineering materials. Application in the design, construction, and performance in engineering parts and structures. General laboratory testing to assess these properties. Prerequisite: ENGR 3203. **Spring.**

**(ENGR) 3cc3. Numerical Methods.**

Numerical solutions of linear and nonlinear algebraic equations, numerical quadrature problems, and ordinary differential equations. Use of application software for solving engineering problems. Prerequisites: MATH 3034 and MATH 3043. **Fall of Even-Numbered Years.**

**(ENGR) 3dd3. Heat Transfer.**

Theory and application of fundamental heat transfer concepts including conduction, convection, and radiation. Introduction to thermal systems design. Prerequisites: MATH 3043, ENGR 3bb3, and ENGR 3aa3. **Spring.**

**(ENGR) 3hh3. Transportation.**

This course will focus on introducing students to areas in highway engineering but will include a general introduction to airfield engineering. Highway engineering topics include highway planning, traffic engineering, geometric design, pavement design and maintenance, and construction projects and plans. Corequisite: ENGR 3bb4. **Spring of Odd-Numbered Years.**

**(ENGR) 3kk3. Introduction to Geotechnical Engineering.**

Soil properties and analyses pertinent to engineering problems and designs, including phase diagrams, classification, compaction, consolidation, hydraulic conductivity, consolidation, and shear strength. Laboratory experiences will be used to explore these properties. Basic bearing capacity analysis will be introduced. Lecture two hours, laboratory two hours per week. Prerequisite: ENGR 3203. **Spring of Even-Numbered Years.**

**(ENGR) 3xx1-3xx2. Internship.**

Internships must relate to the emphasis of the student's coursework (lab or field) and must be approved in advance by the Department Chair and the Dean of Natural Sciences. The course will be graded on a Satisfactory-Unsatisfactory basis where Satisfactory is defined as a grade of C or higher. A limit of two hours of internship credit may be applied to the requirements for a degree. **On Demand.**

**(ENGR) 4aa1. Engineering Capstone I.**

Introduction to open-ended design projects that are typical in the profession. Students will integrate and synthesize their engineering course knowledge to successfully complete a project. Students are organized into design groups, projects are assigned, sites are visited, and planning and organizing begins. Case studies in engineering ethics are investigated and discussed. Laboratory two hours per week. Prerequisites: Senior standing and consent of instructor. **Fall.**

**(ENGR) 4bb3. Engineering Capstone II.**

Projects begun in Engineering Capstone I will be completed. Project planning is completed, design is begun and completed, and the results are presented both in written and oral formats. Lecture one hour, laboratory four hours per week. Prerequisite: ENGR 4aa1. **Spring.**

**(ENGR) 4bb1. Engineering Proficiency.**

The course is designed to help students prepare for the FE exam. Students will review engineering concepts learned during their engineering course of study with topics related to the FE exam. Arkansas state rules to become an engineer in training and the steps to obtain a PE license will be covered. **Fall.**

**(ENGR) 4cc3. Mechanical Element Design.**

Fatigue behavior in structural machine elements such as beam supports, rods, and drive shafts. Analysis of stress and deflection in and design of these elements. Prerequisite: ENGR 3203. **Fall.**

**(ENGR) 4dd3. Mechanical Design Control.**

Selection and use of electrical, pneumatic, hydraulic, and other components used to control and instrument different aspects of mechanical systems. Prerequisites: ENGR 4cc3, ENGR 3aa4. **Spring.**

**(ENGR) 4gg3. Heating, Ventilation, and Air Conditioning.**

Analysis and design of heating, ventilation, and air conditioning systems installed in residential, commercial, and industrial sites. Prerequisite: ENGR 3dd3. **Fall.**

**(ENGR) 4hh3. Water Resources.**

Hydrologic analysis of precipitation, hydraulic analysis and design of water runoff, storm water management, detention basin analysis and design, and flood frequency forecasting. Laboratory experiences will include physical testing and software analysis of topics presented in the lecture. Lecture two hours, laboratory two hours per week. Prerequisite: ENGR 3bb3. **Fall.**

**(ENGR) 4kk3. Structural Analysis and Design.**

Classical and matrix methods for analyzing simple and continuous structures. Introduction to structural design concepts. Introduction and discussion of steel and reinforced concrete design and analysis. Prerequisite: ENGR 3203. **Fall.**

**(ENGR) 4xx1-4xx3. Individual Study, Group Study, Research.**

This course is offered to provide competent students with an opportunity to do independent study and research or to study special topics in engineering. **On Demand.**

**(ENGR) 4yy1-4yy2. Laboratory Peer Instructor.**

Student peer instructors will assist the faculty in laboratory or lecture courses. Peer instructors will engage in individual and small group instruction during laboratory or course review sessions, will be prepared to answer questions related to weekly lab or course exercises, and may assist in the preparation, administration, and grading assignments. Student peer instructors may be required to design a laboratory exercise and/or create exam questions. A limit of two hours of teaching internship credit may be applied to the requirements for a major or minor. Prerequisites: Permission of instructor. **On Demand.**

**Physics****Proposed Changes**

- **Change the time offering of the following courses:**
  - PHYS 4003 Classical Mechanics I from Fall of even-numbered years to Fall of odd-numbered years;
  - PHYS 2123 Statics from Spring to Fall;
  - PHYS 2133 Dynamics from Fall of odd-numbered years to Spring;
  - PHYS 3203 Strength of Materials from On Demand to Fall;

- PHYS 2054 University Physics I from Fall to Spring;
- PHYS 2064 University Physics II from Spring to Fall;
- PHYS 4053 Mathematical Physics from Spring of odd-numbered years to On Demand;
- PHYS 4601 Senior Capstone Experience from Fall to On Demand;
- PHYS 3071 Biophysics Seminar from Spring of odd-numbered years to On Demand;
- PHYS 3XX3 Thermodynamics from Fall of even-numbered year to Spring;
- **Modify the requirements for the following courses:**
  - MATH 3043 needs to be listed as a co-req for PHYS 4043 Intro to Quantum Mechanics;
  - MATH 2014 Calculus I needs to be listed as a co-req for PHYS 2054 University of Physics I and MATH 2024 requirement can be removed;
  - PHYS 2054 University Physics I needs to be listed as a pre-req for PHYS 2064 University Physics II or PHYS 2024 College Physics I and MATH 2014 Calculus I. MATH 2024 requirement can be removed;
  - Change the number of PHYS 4023 Thermodynamics to PHYS 3xx3 Thermodynamics;
  - Change the pre-requisites for PHYS 4023 Thermodynamics from MATH 3043 Differential Equations to MATH 2024 Calculus II;
- **Modify course content and hours** for the following courses:
  - Merge PHYS 3123 Electric Circuits and PHYS 3131 Electric Circuits Lab into a single four-hour course, PHYS 3xx4 Electric Circuits;
  - Change the number of hours and the course number for PHYS 1121 Intro to Physics / Engineering to three hours to PHYS 1123;
  - Remove the lab from PHYS 3034 Electricity & Magnetism and changing the number of hours for the course from four to three (and thus the course number to PHYS 3xx3);
- **Add the following courses:**
  - PHYS 2xx3 University Physics III with a pre-req of PHYS 2054 University Physics I, to be held in Spring;
  - PHYS 4xx1 Physics Education Proficiency;
  - PHYS 3xx1-3xx2 Internship;
  - PHYS 3xx1 Intermediate Physics Lab with a pre-req of PHYS 3004 Introduction to Modern Physics, to be held On Demand;
- **Modify the degree and program in the following ways:**
  - Remove the Pre-Engineering listing;
  - Remove the B.A. in Physics degree;
  - Remove the second major requirement from the B.A. in Applied Physics degree;
  - Remove CHEM 1014 Chemistry II as a requirement for the B.S. in Engineering Physics degree;
  - Remove PHYS 4601 Senior Capstone Experience from the Physics degree requirements;
  - Add PHYS 4341 Lab Peer Instructor as a course option to the approved Biophysics course list in the B.S. in Biophysics degree;
  - Changes to all physics degrees requirements to include possible ENGR courses.

### Rationale

The following are the proposed changes within the Physics Department as a result of adding an engineering degree as well as a few others that were already in the works from student feedback and our departmental review.

### Catalog Entry

## Physics (PHYS)

Because physics is basic to other disciplines in the sciences and in engineering, our curriculum is designed to prepare students for many options after graduation. A portion of our students pursue graduate work in physics directed toward employment in research or teaching. Some students attend professional schools in areas such as engineering, law, or medicine; others work in related fields, such as Biophysics or Geophysics. However, many of our students go directly to work in industry after receiving their bachelor's degree. These students benefit greatly from the option in Engineering Physics outlined below. This degree is of value to the student who may enjoy both physics and engineering and is considering a career path in either industry and graduate school. Students undecided about these options will find our faculty informed and readily available to assist in making these important career decisions.

### Dual Degree Program in Engineering

Students who wish to take advantage of a liberal arts education and receive a specialized engineering degree not provided at Ouachita can do so as part of our Dual Degree Program. Students begin their collegiate career at Ouachita majoring in Engineering Physics. Over the course of three years, a student will take all the CORE Ouachita requirements for a degree and meet as much of the B.S. in Engineering Physics degree requirements as possible. Starting their fourth year, a student will transfer to one of our cooperating schools to enter the specific engineering degree of their choosing. While at the cooperating school, they will focus primarily on upper-level engineering courses. At the end of their time at the engineering school, a student will submit their engineering school transcript to Ouachita to receive the remaining credits needed to complete the B.S. in Engineering Physics degree originally started at Ouachita. In so doing, a student will receive two degrees from two universities. The estimated time for completing both degrees is five years; however, the amount of college credit a student begins with, number of hours taken per semester, and the specific type of engineering degree desired, among other factors, can alter that estimated time frame. Currently, we have cooperative agreements with the ABET accredited schools of the University of Arkansas, Missouri S&T, and Louisiana Tech University.

All courses in this Department require a grade of C or better in the prerequisite course(s) or consent of the Department Chair to enroll in subsequent courses.

### Requirements for a B.S. in Physics:

PHYS 1123, 2054, 2064 (or 2024, 2034), 2aa3, 3004, 3ab3, 3aa1, 4003, 4043, 4061 or 4081 plus nine additional approved hours in physics or engineering, three of which must be at the Jr/Sr level; 8 hours from CHEM 1004, 1014, BIOL 1014, 1024 subject to all existing prerequisites; MATH 2014, 2024, 3034, 3043, plus three additional Junior-Senior hours in Mathematics; CSCI 1044; ENGL 3013 or CORE 2053; completion of a minor in biology, chemistry, computer science or mathematics.

### Requirements for a B.S. in Engineering Physics:

PHYS 1123, 2054, 2064 (or 2024, 2034), 2aa3, 3004, 3ab3 or 4043, 4003, 4061; ENGR 1112, 2123, 2133, plus nine additional approved hours in physics or engineering (at least 6 hours must be at the Junior-Senior level); CHEM 1004; MATH 2014, 2024, 3034, 3043, plus three additional Junior-Senior hours in Mathematics; CSCI 1044; ENGL 3013 or CORE 2053; completion of a minor in biology, chemistry, computer science, or mathematics.

### Requirements for a B.S. in Biophysics:

PHYS 1123, 2054, 2064 (or 2024, 2034), 3004, 4643, 4061, and at least 8 hours from PHYS 3aa1, 3ab3,

4003, 4043, 4341; ENGR 3aa3, 3aa4; BIOL 1014, 1024, 4064, one course from BIOL 2014, 2604, 3014, 3064, 3683, 4054; CHEM 1004, 1014, 3004, 3104, CHEM 4023 or MATH 2063; MATH 2014, 2024, 3034, 3043; ENGL 3013 or 2053; and one research credit hour from either BIOL 4001, CHEM 4511, or PHYS 4801.

**Requirements for a B.A. in Applied Physics:**

PHYS 1123, 2054, 2064 (or 2024, 2034), 3004, 4061 and at least 11 additional hours in physics or engineering, 8 hours of which must be at the Junior-Senior level, for a minimum of twenty-seven hours; MATH 2014, 2024, 3034; ENGL 3013 or CORE 2053. The Applied Physics B.A. degree is meant to be a part of a wider liberal arts education and is not intended to be a graduate school preparatory degree. It is strongly encouraged, but not required, that students pair this degree with a second major (B.A.) or a second degree (B.S.). Thirty additional hours are required to earn a B.S. (see page 29).

**Requirements for a B.A. in Physics (Teaching Emphasis):**

PHYS 2054, 2064 (or 2024, 2034), 2aa3, 3004, 4aa1, ENGR 3aa4 and plus four additional hours in physics, which must be Junior-Senior level, for a minimum of 24 hours. MATH 2014, 2024, 3003, 3034, 3063, 3083, 4013, 4483. CSCI 1044. In addition, students must complete a second major in Secondary Education by completing the following courses: EDFN 2003, 2053, 3083, 4123, 4403, 4406, 4416; SCED 3043, 4523.

**Requirements for a minor in Physics:** PHYS 2054, 2064 (or 2024, 2034), 3004, and additional courses in physics or engineering to total at least eighteen hours. PHYS 1203 may be taken with consent of Department chair. A split minor may not be taken in physics.

**(PHYS) 2024. College Physics I.**

Introductory non-calculus-based course in the fundamental principles of physics including 1D and 2D mechanics, fluids, and waves. Lecture three hours, laboratory two hours per week. Prerequisite: MATH 1003, 1013, or equivalent. **Fall.**

**(PHYS) 2034. College Physics II.**

Introductory non-calculus-based course in the fundamental principles of physics including electricity and magnetism, basic electric circuits, and optics. Lecture three hours, laboratory two hours per week. Prerequisite: MATH 1003, 1013, or equivalent. **Spring.**

**(PHYS) 2054. University Physics I.**

Introductory course in physics using calculus, designed for physical science and engineering majors. This course will focus on topics in Mechanics. Lecture three hours, laboratory two hours per week. Corequisite MATH 2014. **Spring.**

**(PHYS) 2064. University Physics II.**

Introductory course in physics using calculus, designed for physical science and engineering majors. This course to focus on a survey of Electricity and Magnetism. Lecture three hours, laboratory two hours per week. Prerequisite PHYS 2054 or PHYS 2024 and MATH 2014. **Fall.**

**(PHYS) 2aa3. University Physics III.**

Introductory course in physics using calculus, designed for physical science, education, and engineering majors. This course will focus specifically on topics in oscillations and mechanical waves, thermodynamics, light and optics. Prerequisite: PHYS 2024 and MATH 2014 or PHYS 2054 **Spring.**

**(PHYS) 3aa1. Intermediate Physics Laboratory.**

This course is designed to further a student's education in experimental physics. The student will



become familiar with more advanced equipment and techniques, more sophisticated mathematical tools to analyze the data, and then use them to perform several experiments in a variety of fields. Prerequisite: PHYS 3004. **On Demand.**

**(PHYS) 3ab3. Electricity & Magnetism I.**

A study of the principles of electricity and magnetism in a vacuum. Topics typically include electrostatics, magnetostatics, Laplace's Equation, Maxwell's Equations, and conservation laws. Vector Calculus is introduced and used throughout. Prerequisites: PHYS 2034 or 2064; MATH 3034. **Spring of even-numbered years.**

**PHYS 3023 Thermodynamics**

Introduction of fundamental concepts. Units and measures; properties of pure substance, first and second laws of thermodynamics, work, heat, entropy, analysis of various thermodynamic cycles. Prerequisite: PHYS 2064 or PHYS 2034 and MATH 2014. **Spring.**

**(PHYS) 3bb1-3bb2. Internship.**

Internships must relate to the emphasis of the student's coursework (lab or field) and must be approved in advance by the Department Chair and the Dean of Natural Sciences. The course will be graded on a Satisfactory-Unsatisfactory basis where Satisfactory is defined as a grade of C or higher. A limit of two hours of internship credit may be applied to the requirements for a degree. **On Demand.**

**(PHYS) 4aa1. Physics Education Proficiency.**

The course is designed to help students prepare for the Praxis II exam in physics. Students will review physics concepts learned during their physics education course of study with topics related to the Praxis exam. **Spring.**

**(PHYS) 4061. Introduction to Research.**

To introduce the student to the theory, techniques and methods of laboratory and library research within the broader liberal arts experience students gained through the Ouachita Core. Open only to Senior Physics students, or by permission of instructor. **Fall, Spring.**

## Social Sciences

<p><b>Psychology</b></p>	<p><b>Proposed Changes</b></p> <ul style="list-style-type: none"> <li>• Change PSYC/BIOL 3064 Neuroscience (with lab) to PSYC/BIOL 3063 Neuroscience (without lab)</li> </ul> <p><b>Rationale</b></p> <p>Due to personnel changes in psychology, a new faculty member will be teaching this course, which is a great time to revisit the structure and format of the course. Most Neuroscience courses in undergraduate psychology programs do not include a lab. Instead, lab-like activities are incorporated into the regular class period. Such changes would like to be made for our offering of this course.</p> <p>This course is cross listed in Biology. We have already communicated with the Dean in Natural Sciences, and he supports this change and still desires for it to be cross listed.</p> <p><b>Catalog Entry</b></p> <p>p. 148</p> <p><b>BIOL 3063. Neuroscience.</b> An introduction to the biological substrate of behavior and experience, especially as expressed in neuroanatomy, neurophysiology and behavioral neuroscience. Prerequisite: CORE 2334 or BIOL 1014. Also listed as PSYC 3063. Spring.</p> <p>p. 186</p> <p><b>PSYC 3063. Neuroscience.</b> An introduction to the biological substrate of behavior and experience, especially as expressed in neuroanatomy, neurophysiology and behavioral neuroscience. Prerequisite: CORE 2334 or BIOL 1014. Also listed as BIOL 3063. Spring.</p>
<p><b>Psychology</b></p>	<p><b>Proposed Changes</b></p> <ul style="list-style-type: none"> <li>• Add 4XX1-4XX3 Psychology Internship to the catalog.</li> </ul> <p><b>Rationale</b></p> <p>We regularly have interns in the psychology department, and, currently, we register students for this class under a special studies in psychology course. However, we would like to directly add this internship as a course offering. The internships are of great interest to our current students as well as prospective students. We are frequently asked if we offer internships, and we want the catalog to be able to answer this question. The reasoning for the 1-3-hour range for this course is that some students have more/less hours to devote to the onsite requirements for the internship. By providing a 1-3-hour range more students are able to participate in an internship even if they do not have the time in their schedule for the maximum number of hours. Finally, the addition of this course does not alter the Degree Summary Chart as an internship is not a degree requirement.</p>

	<p><b>Catalog Entry</b></p> <p>p. 187</p> <p><b>PSYC 4XX1-4XX3. Psychology Internship.</b> This course provides students with the opportunity to receive academic credit for supervised, professional level service and work experience. Prerequisites: PSYC 1013, Junior or Senior standing, and instructor permission. On Demand.</p>
<p><b>Psychology</b></p>	<p><b>Proposed Change</b></p> <ul style="list-style-type: none"> <li>• Add PSYC 4XX1. Peer Instructor</li> </ul> <p><b>Rationale</b></p> <p>This course will allow upper-level students to gain valuable teaching experience assisting professors and students in psychology courses. This is an experience that is regularly offered in psychology, but it has not been in the catalog. We want students to readily see that this is a potential opportunity.</p> <p>Also, because this is an elective for Jr/Sr hours, the Peer Instructor credit would cause no changes to the degree summary for the Psychology major.</p> <p><b>Catalog Entry</b></p> <p>p. 187</p> <p><b>PSYC 4XX1. Peer Instructor.</b> Student peer instructors will be assigned to a psychology course to help facilitate student learning. The course, which may be taken up to two times, is graded S/U. Prerequisite: Junior or Senior standing and instructor permission. On Demand.</p>
<p><b>Psychology</b></p>	<p><b>Proposed Change</b></p> <ul style="list-style-type: none"> <li>• Change the required courses for a minor in psychology from: “a minimum of 18 hours of department-approved (PSYC) courses, including PSYC 1013, 2033, plus three from among PSYC 3013, 3064, 3093, and 4033” to: “a minimum of 18 hours of department-approved (PSYC) courses, including PSYC 1013 and two from among PSYC 2033, 3013, 3064, 3093, and 4033.”</li> </ul> <p><b>Rationale</b></p> <p>Right now, the minor requires 15 of the 18 hours to be specific courses. This is restrictive and can make it extremely challenging for students to get the required courses when they are only offered once a year. We want to allow more flexibility in course selection for a psychology minor, while still providing students with a strong foundation in the core psychology topics. This will allow students to tailor their psychology studies to fit more to their specific interests (e.g., taking certain topical seminar courses) and will make a psychology minor more feasible to complete.</p>

	<p><b>Catalog Entry</b></p> <p>p. 184</p> <p><b>Requirement for a minor in Psychology</b>  A minor in Psychology requires a minimum of 18 hours of department-approved (PSYC) courses, including PSYC 1013 and a minimum of two from among PSYC 2033, 3013, 3064, 3093, and 4033. Psychology does not approve split minors.</p>
<p><b>Psychology</b></p>	<p><b>Proposed Change</b></p> <ul style="list-style-type: none"> <li>Remove PSYC 4043 Perception</li> </ul> <p><b>Rationale</b></p> <p>This course has not been taught in over 7 years, and there are no plans on teaching it on a regular basis in the future. This is not a required course for the major, so the removal of this course does not alter the degree plan. It does help clean up the catalogue to better reflect the current course offerings.</p> <p><b>Catalog Entry</b></p> <p>p. 187</p> <p>[Remove PSYC 4043 Perception.]</p>
<p><b>Psychology</b></p> <p><b>Short Form</b></p>	<p><b>Proposed Change</b></p> <ul style="list-style-type: none"> <li>Change the title of PSYC 3024 from “Learning” to “Behavior Analysis.” Further, elaborate on the course description to better explain the concepts covered in this course.</li> </ul> <p><b>Rationale</b></p> <p>The title “Learning” does not clearly make the connection with the field of Behavior Analysis, including Ouachita’s Applied Behavior Analysis Master’s program. The change in title and course description will hopefully help students better understand what will be taught in the class and will get students interested in ABA into this class.</p> <p><b>Catalog Entry</b></p> <p>p. 186-187</p> <p><b>PSYC 3023. Behavior Analysis.</b>  A study of the principles and theories of learning in the field of behavior analysis. This course will cover basic learning principles, common behavioral procedures, the research methods and techniques of behavior analysis, as well as the application of behavior analysis across a wide range of populations, settings, and behaviors. Prerequisite: PSYC 1013. On Demand.</p>

<p><b>Psychology</b></p> <p><b>Short Form</b></p>	<p><b>Proposed Changes</b></p> <ul style="list-style-type: none"> <li>• Change PSYC 4061 Senior Research to PSYC 4061-4063 Senior Research</li> </ul> <p><b>Rationale</b></p> <p>We have many students that conduct more advanced research projects during their junior or senior years. We want to be able to give credit for these projects, and sometimes that amount of work involved warrants 2 or 3 hours of credit, not just 1 hour. This will give us the flexibility to offer more course credit for this crucial high-impact learning experience.</p> <p><b>Catalog Entry</b></p> <p>p. 187</p> <p><b>PSYC 4061-4063. Senior Research.</b> A course designed to give the student additional experience in conducting individualized psychological experimentation. A student cannot earn credit for more than 3 hours total. Prerequisite: PSYC 3053. On Demand.</p>
<p><b>Political Science</b></p>	<p><b>Proposed Changes</b></p> <ul style="list-style-type: none"> <li>• Delete PSCI 4123 International Relations Theory</li> <li>• Add PSCI 4XX3 International Law and Organization</li> </ul> <p><b>Rationale</b></p> <p>Replacing PSCI 4123 with a course more focused on international law will better serve the interests of Political Science students, many of whom desire to study law.</p> <p><b>Catalog Entry</b></p> <p>p. 182-183</p> <p><b>PSCI 4xx3. International Law and Organization.</b> This course examines the role of international law and the activities and effects of intergovernmental organizations as well as non-governmental organizations. Spring of even-numbered years.</p>
<p><b>Political Science</b></p> <p><b>Short Form</b></p>	<p><b>Proposed Changes</b></p> <ul style="list-style-type: none"> <li>• Add PSCI 4XX3 International Law and Organization to the flexible menu of the Legal Studies Minor.</li> </ul> <p><b>Rationale</b></p> <p>The Patterson School of Natural Sciences has ceased offering NSCI 3202 Environmental Law, which had been listed as an option on the Flexible Menu of the Legal Studies Minor. Adding PSCI 4xx3 International Law and Organization restores the original number of options to this menu.</p>

	<p><b>Catalog Entry</b></p> <p>p. 176</p> <p><b>Legal Studies Minor</b> Ouachita’s Legal Studies Minor (21 hours), which may be taken with any major, provides greater understanding of law and legal institutions as well as developing analytical and writing skills.</p> <p>Required: PHIL 1023 Logic ENGL 2023 Traditional and Transformational Grammar BUAD 3003 The Legal Environment of Business PSCI 3033 Constitutional Law PSCI 3043 Judicial Process</p> <p>Flexible (choose two of the following): COMM 4023 Communication Law PSCI 4xx3 International Law and Organization SOCI 3023 Crime and Deviance SPTM 4023 Sport Law</p>
<p><b>Political Science</b></p> <p><b>Short Form</b></p>	<p><b>Proposed Changes</b></p> <ul style="list-style-type: none"> <li>• Change the title of PSCI 4133 Third World Politics to PSCI 4133 Politics of the Global South</li> </ul> <p><b>Rationale</b></p> <p>The term “Third World” is being used far less than in the past, and the term “Global South” is a concept commonly used now. Also, as discussed when the course was initially created in the early 2000s, “Third World” has been a controversial concept. Furthermore, a declining number of countries originally classified as “Third World” embody the traits that define this concept. Therefore, “Global South” is a more accurate description of these countries.</p> <p><b>Catalog Entry</b></p> <p>p. 183</p> <p><b>PSCI 4133. Politics of the Global South.</b> A substantive and theoretical study of the political processes and major issues confronting Latin America, Africa, and Central and Southern Asia. Spring of odd-numbered years.</p>