Summary and Proposals September 27, 2022 Curriculum Committee/October 11, 2022 Faculty Senate

1. College of Arts and Humanities - Department of History and Political Science
a. Modify the Minor Pre-Law
(1) Add the following courses: PHIL 2053: Introduction to Critical Thinking; and POLS 4033: Principles of Legal Study;
(2) Delete the following courses:

PHIL 3023: Ethics; and
ENGL 2053: Technical Writing; and
(3) Add ENGL 2053: Technical Writing, or ENGL 2043: Introduction to Creative Writing.
2. College of Education and Health - Department of Kinesiology and Rehabilitation Science
a. Change the degree for the Bachelor of Arts in Rehabilitation Science to a Bachelor of Science. Remove the name change proposal from the agenda since this type of change goes directly to ADHE for approval.
3. College of Science, Technology, Engineering, and Mathematics - Department of Engineering and Computing Sciences
a. Delete ELEG/MATH 3173: Math Methods for Engineers, from the course descriptions.
4. College of Science, Technology, Engineering, \& Mathematics - Department of Mathematics and Statistics
a. Delete MATH/ELEG 3173: Math Methods for Engineers, from the course descriptions.
5. College of Science, Technology, Engineering, and Mathematics - Department of Physical Science
a. Modify the Minor in Engineering Physics, as follows:
(1) Change the name to Minor in Physics;
(2) Delete 11 hours of Physics Electives;
(3) Require the following courses:

PHYS 2114: Calculus-Based Physics I,
PHYS 2124: Calculus-Based Physics II, and PHYS 3213: Modern Physics;
(4) DELETE ITEM 4: Add 6 hours of UD Physics Electives;
(5) DELETE ITEM 5: Add 3 hours of UD PHYS and MATH Electives; REPLACE WITH: Change PHYS Electives (9 hours of 3000-4000 level) to 6 hours of UD PHYS Electives and 3 hours of UD PHYS or MATH Electives; and
(6) Update the program description.


REQUEST FOR PROGRAM CHANGE

| Department Initiating Proposal | Date |
| :--- | :--- |
| History and Political Science | $5 / 20 / 2022$ |



| Committee | Approval Date |
| :--- | :--- |
| General Education Committee (Undergraduate Proposals Only) |  |
| Teacher Education Committee (Graduate or Undergraduate Proposals) |  |
| Curriculum Committee (Undergraduate Proposals Only) |  |
| Faculty Senate (Undergraduate Proposals Only) |  |
| Graduate Council (Graduate Proposals Only) |  |

## Program Title:

Pre-Law Minor

> Outline change in program: (e.g., list changes in program such as (1) delete three hours of elective and (2) add three hours of approved major electives)
> Add PHIL 2053 Introduction To Critical Thinking as an elective to the pre-law minor Add POLS 4033 Principles of Legal Study as an elective to the pre-law minor Delete PHIL 3023 Ethics as an elective to the pre-law minor
> Delete ENGL 2053 Technical Writing as a requirement to the pre-law minor Add ENGL 2053 Technical Writing or ENGL 2043 Creative Writing as a requirement to the pre-law minor

What impact will the change have on staffing, on other programs and space allocation?

## No Impact

Answer the following Assessment questions:
a. How does the program change align with the university mission?
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
c. What is the rationale for this program change?

1. How will the program change impact learning for students enrolled in this program?
2. Provide an example or examples of student learning assessment evidence which supports the changes in the program.
b. How does this program fit in the current state of the discipline? Include Arkansas institutional comparisons. If Arkansas educational institutions do not have the course or program provide comparative examples from regional educational institutions.
c. Attach a detailed assessment plan including three to five specific program student learning outcomes, means or instructional measures to assess each outcome, identify program courses where learning will be assessed, and performance standards or criteria for success which demonstrate student learning for each outcome. (Examples for assessment plans/curriculum mapping can be found at the Office of Assessment and Institutional Effectiveness web page.)

If this course will affect other departments, a Departmental Support Form for each affected department must be attached. The form is located on the Curriculum forms web page at http://www.atu.edu/registrar/curriculum forms.php.

## Arkansas Tech University DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

| Department Affected: <br> English \& World Languages | This department <br> X supports <br> the change. |
| :--- | :--- |

Comments:

EWL supports the revision of the Pre-Law minor so that students have the option to choose between ENGL 2043 Introduction to Creative Writing and ENGL 2053 Technical Writing.

Department Head Signature:


Date:05-31-22

## Pre-Law

The pre-law minor program's objective is to prepare students for entrance to and advanced study at law school or alternative careers in the legal profession (e.g. legal aide, court reporter, paralegal, etc.) upon graduation through the development of writing, analytic and logical reasoning, and research skills key to the study and practice of law.

## The minor in pre-law requires 21 hours of courses:

- COMM 2003 Public Speaking
- ENGL2053 Technical Writing
- PHIL 3103 Logic
- POLS/CJ 3023 Judicial Process or POLS 3043 Judicial Politics
- POLS 4043 American Constitutional Law
and 6 hours selected from the following:
- BLAW 2033 Legal Environment of Business
- CJ 4023 Law and the Legal System
- HIST 3023 The Era of the American Revolution
- HIST 4183 American Legal History
- MGMT 3123 Business Ethics
- PHIL 3023 Ethics
- PHIL 3073 Philosophy of Law



## Religious Studies

The minor in religious studies is designed to provide students with the opportunity to learn about religion in cross-cultural and historical perspectives. The required courses are designed to provide a comparative perspective on world religions and to develop an appreciation of both the origins and contemporary expressions of different religions. This minor is particularly well suited for students in the humanities and social sciences as well as students in other disciplines who want to deepen their understanding of the role of religion in contemporary life.

## Students must have a minimum of 2.00 grade point average in the required 18 hours to be eligible for a religious studies minor:

- ANTH 2003 Cultural Anthropology
- HIST 1503 World History to 1500
- HIST 4503 History of Christianity
- PHIL 2013 Religions of the World
- PHIL 3053 Philosophy of Religion
- SOC 4073 Sociology of Religion


## Strategic Studies

## DEGREE AUDIT CHECK LIST <br> (MINOR-PLAW) Pre-Law 2022-23 2023-24



Final Check:21
$\qquad$ to be completed $\qquad$ TOTAL $\qquad$

Must have 2.00 in minor
Must have minimum of 6 hours in residence Must use same catalog for both major and minor

KINESIOLOGY AND REHABILITATION SCIENCE

407 West Q Street
Witherspoon Hall, 336
August 31, 2022

Russelloille, AR 72801
6 479-968-0283

TO: ATU Curriculum Committee
FROM: Erica L. Wondolowski, Ph.D., CRC
DATE: August 31, 2022
SUBJECT: Request for Change in RS Degree Type

Keeping in line with the reallocation of the Rehabilitation Science program into the College of Education and Health and the Department of Kinesiology and Rehabilitation, the Rehabilitation Science program would like to request that the scientific underpinnings of the degree be acknowledged by changing the degree awarded from a Bachelor of Arts to a Bachelor of Science.

More specifically, it is requested that the BA in Rehabilitation Science, ADHE Degree Code 1740, CIP Code 51.2314 is changed to a BS in Rehabilitation Science with no change to the curriculum, ADHE Degree Code, or CIP Code.

Thank you for your consideration in this matter.


Erica L. Wondolowski, Ph.D., CRC
Associate Professor and Program Director
Rehabilitation Science Program
Arkansas Tech University

## APPROVED BY <br> 

Dr. Rockie Pederson, Department Chair
Department of Kinesiology and Rehabilitation Science


College of Education and Health


REQUEST FOR COURSE DELETION

| Department Initiating Proposal | Date |
| :--- | :--- |
| Engineering and Computing Sciences | $6 / 28 / 2022$ |


| Title | Signature | Date |
| :---: | :---: | :---: |
| Department Head | Gohn L Kiohn | 6/28/2022 |
| Dean <br> Judy L. Cezeaux | lusy K Gout | 7/1/2022 |
| Assessment |  | $8 / 9 / 2088$ |
| Registrar | sammy lwaner | 8/912022 |
| Graduate Dean (Graduate Proposals Only) | $\bigcirc$ |  |
| Vice President for Academic Affairs |  |  |


| Committee | Approval Date |
| :--- | :--- |
| General Education Committee (Undergraduate Proposals Only) |  |
| Teacher Education Committee (Graduate or Undergraduate Proposals) |  |
| Curriculum Committee (Undergraduate Proposals Only) |  |
| Faculty Senate (Undergraduate Proposals Only) |  |
| Graduate Council (Graduate Proposals Only) |  |


| Course Subject: (e.g., ACCT, ENGL) <br> ELEG | Course Number: (e.g., 1003) <br> 3173 |
| :--- | :--- |
| Official Catalog Title: |  |
| Math Methods for Engineers |  |

Is this course cross-listed with another existing course? If so, list course subject and number. © Yes $C$ No

MATH 3173
Will the cross-listed course be deleted? © Yes $\subset$ No
(NOTE: If major or minor course, you must complete the Request for Program Change form to delete course from program.)

Answer the following Assessment questions:
a. If this course is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable. Not Applicable.
b. If this course was required for the major or minor, complete the following.

1. How will program level learning outcome(s) previously addressed by this course now be addressed?
The material in this course will be covered in other courses in the curriculum. See c.
c. What is the rationale for deleting this course? What evidence supports this action? The course is no longer required in the curriculum. The course content includes linear algebra, complex variables, discrete mathematics, and applied statistics which is too broad to be covered in depth in one course. The content is now covered in other courses in the curriculum. Electrical Engineering, Electrical Engineering with Biomedical Option, and Computer Engineering majors take MATH 2703: Discrete Mathematics and STAT 3153: Applied Statistics. Linear algebra and complex variables topics are included in the ELEG 2103, 2113, and 3123 courses.

If this course will affect other departments, a Departmental Support Form for each affected department must be attached. The form is located on the Curriculum forms web page at http://www.atu.edu/registrar/curriculum forms.php.

NOTE: This deletion will be effective at the end of the spring term of the current catalog year.


## "ARKANSAS TECH UNIVERSITY

## REQUEST FOR COURSE DELETION

| Department Initiating Proposal | Date |
| :--- | :--- |
| Mathematics and Statistics | $6 / 28 / 2022$ |


| Title | Signature | Date |
| :---: | :---: | :---: |
| Department Head Jeanine L. Myers | feai y. Mypa | 6/28/2022 |
| Dean <br> Judy L. Cezeaux | lasy K bork | 7/1/2022 |
| Assessment <br> Dr. Christine Austin | Cuictitush. | 7/8/2022 |
| Registrar | Lammyleceuur | 811122 |
| Graduate Dean (Graduate Proposals Only) | , |  |
| Vice President for Academic Affairs |  |  |


| Committee | Approval Date |
| :--- | :--- |
| General Education Committee (Undergraduate Proposals Only) |  |
| Teacher Education Committee (Graduate or Undergraduate Proposals) |  |
| Curriculum Committee (Undergraduate Proposals Only) |  |
| Faculty Senate (Undergraduate Proposals Only) |  |
| Graduate Council (Graduate Proposals Only) |  |


| Course Subject: (e.g., ACCT, ENGL) | Course Number: (e.g., 1003) <br> MATH |
| :--- | :--- |
| Official Catalog Title: |  |
| Math Methods for Engineers |  |

```
Is this course cross-listed with another existing course? If so, list course subject and number.
- Yes C No
    ELEG 3173
Will the cross-listed course be deleted? }\mp@subsup{}{}{\bullet}\mathrm{ Yes 「 No
(NOTE: If major or minor course, you must complete the Request for Program Change form to delete course from program.)
Answer the following Assessment questions:
a. If this course is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
Not Applicable.
b. If this course was required for the major or minor, complete the following.
1. How will program level learning outcome(s) previously addressed by this course now be addressed?
The material in this course will be covered in other courses in the curriculum. See c.
c. What is the rationale for deleting this course? What evidence supports this action? The course is no longer required in the engineering curriculum and math students don't take it so we are deleting it. The course content includes linear algebra, complex variables, discrete mathematics, and applied statistics which is too broad to be covered in depth in one course. The content is now covered in other courses in the curriculum. Electrical Engineering, Electrical Engineering with Biomedical Option, and Computer Engineering majors take MATH 2703: Discrete Mathematics and STAT 3153: Applied Statistics. Linear algebra and complex variables topics are included in the ELEG 2103, 2113, and 3123 courses.
If this course will affect other departments, a Departmental Support Form for each affected department must be attached. The form is located on the Curriculum forms web page at http://www.atu.edu/registrar/curriculum forms.php.
NOTE: This deletion will be effective at the end of the spring term of the current catalog year.
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REQUEST FOR PROGRAM CHANGE

| Department Initiating Proposal | Date |
| :--- | :--- |
| Department of Physical Sciences | $3-22-2022$ |


| Title | Signature | Date |
| :---: | :---: | :---: |
| Department Head |  | 3-22-2022 |
| Dean |  | 3-22-2022 |
| Assessment |  | 8.9-2022 |
| Registrar | Yommylueaues | $81912022$ |
| Graduate Dean (Graduate Proposals Only) | - |  |
| Vice President for Academic Affairs |  |  |


| Committee | Approval Date |
| :--- | :--- |
| General Education Committee (Undergraduate Proposals Only) |  |
| Teacher Education Committee (Graduate or Undergraduate Proposals) |  |
| Curriculum Committee (Undergraduate Proposals Only) |  |
| Faculty Senate (Undergraduate Proposals Only) |  |
| Graduate Council (Graduate Proposals Only) |  |

Program Title:
Minor in Engineering Physics

Outline change in program: (e.g., list changes in program such as (1) delete three hours of elective and (2) add three hours of approved major electives)

1- Change the name from "minor in engineering physics" to "minor in physics";
2-Delete 11 hours of Physics Electives;
3- Require the following courses: PHYS 2114, PHYS 2124, PHYS 3213;
4- DELETE: Add 6 hours of UD PHYS Electives;
5- DELETE: Add 3 hours of UP PHYS or MATH Electives; and REPLACE WITH:
Change PHYS Electives (9 hours of 3000-4000 level) to 6 hours of UD PHYS
Electives and 3 hours of UD PHYS or MATH Electives; and
6 - Change engineering physics to physics in minor program description.
What impact will the change have on staffing, on other programs and space allocation?

## No impact

Answer the following Assessment questions:

Attached is the Physics degree program assessment plan.
a. How does the program change align with the university mission?

Arkansas Tech University is dedicated to student success and excellence. To achieve that we have changed the curricula for the physics and engineering physics program. As part of the change, PHYS 3023 is offered on a yearly basis. This course could play an essential role for some other majors (chemistry, electrical engineering, etc.) if they choose to go to graduate programs. So we decided to include this course in the minor of physics required courses, since it is the backbone for all the modern physics application in any part of the science.
b. If this change in the program is mandated by an accrediting or certifying agency, include the directive. If not, state not applicable.
NA
c. What is the rationale for this program change?

As mentioned above, PHYS 3023 is a very important course for whoever wanting to do anything physics related. It is understood that if someone wants to have a minor in physics, they possibly want to use it in some ways, and that means they must have basic understanding of the modern physics. Besides, there was no way we could have an exact number of 20 hours for students, so we changed the required number of hours to 18 .
d. How does this program fit in the current state of the discipline?

Several programs use the minor programs to introduce the physics (as a major) to students. Some students might take modern physics and realize they like to become physicists. That is one of the main reasons minor in physics is so important for our program to generate more physics majors.
e. Attach a detailed assessment plan including three to five specific program student learning outcomes, means or instructional measures to assess each outcome, identify program courses where learning will be assessed, and performance standards or criteria for success which demonstrate student learning for each outcome. (Examples for assessment plans/curriculum mapping can be found at the Office of Assessment and Institutional Effectiveness web page.)
A tentative assessment plan that we use for our physics program is attached.

If this course will affect other departments, a Departmental Support Form for each affected department must be attached. The form is located on the Curriculum forms web page at http://www.atu.edu/registrar/curriculum forms.php.

## Tentative Physics PLO's (Subject to change to satisfy ANSAC criteria)

(I: Introduce, R: Reinforce, E: Emphasize)

PLO 1: An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to classical and modern physics.

| Performance Indicator |  |  |
| :--- | :--- | :--- |
| State the fundamental laws of <br> classical physics | PHYS 2114/2000 \& 2124/2010 | I |
| Understand the fundamental <br> concepts of quantum physics | PHYS 3213, PHYS 4013 | R |
| Explain different natural <br> phenomena using the <br> fundamental concepts of <br> classical and quantum physics | PHYS 3023, PHYS 3133, PHYS <br> 4003 | R |
| Develop ways to describe a <br> specific phenomenon and <br> formulate it | PHYS 4951 | E |

PLO 2: An ability to formulate or design a system, procedure or program to meet desired needs.

| Performance Indicator |  |  |
| :--- | :--- | :--- |
| Recognize and apply the <br> relevant laws of physics to the <br> problem | PHYS 2114/2000, PHYS <br> $2124 / 2010$, PHYS 3213 | I |
| Use experimental, <br> computational or theoretical <br> methods to meet the desired <br> needs. | PHYS 3023, PHYS 3133, PHYS <br> 4013, PHYS 4xx3 <br> (Computational Physics) | R |
| Design the needed system or <br> develop the computer codes to <br> solve the problem in hand. | PHYS 4951 | E |

PLO 3: An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgement to draw conclusion.

| Performance Indicator |  | I |
| :--- | :--- | :--- |
| Conduct experiments and <br> collect and analyze data | PHYS 2000, PHYS 2010 | I |
| Fit data into graphs, analyze and <br> interpret the data using the <br> fundamental laws of physics | PHYS 3003, PHYS 4113 | R |
| Plan experiments to test <br> different hypotheses, analyze <br> the data and recommend new <br> ideas to improve the <br> experiment. | PHYS 4951 | E |

PLO 4: An ability to communicate effectively with a range of audience.

| Performance Indicator |  | I |
| :--- | :--- | :--- |
| Present Content in their own <br> words | PHSC 1011, PHYS 2000, PHYS <br> 2010 | I |
| Organize and analyze the data <br> in a meaningful and scientific <br> way | PHYS 4113 | R |
| Prepare presentation and <br> present them in local or <br> national meetings | PHYS 4951 | E |
| Criticize peers' presentations in <br> a scientific way | PHYS 4951 | E |

PLO 5: An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

| Performance Indicator |  |  |
| :--- | :--- | :--- |
| Perform effectively in teams to <br> conduct experiments | PHYS 2000, PHYS 2010 | I |
| Show the ability to plan the <br> experiments and meet the <br> deadlines in group settings | PHYS 3003, PHYS 4113 | R |
| Coordinate effectively within <br> the team to plan the <br> experiment, analyze the data <br> and finalize the results | PHYS 4951 | E |

## Arkansas Tech University DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.

| Department Affected: <br> Electrical Engineering | This department <br> $x \square$ supports <br> the change. |
| :--- | :--- |

Comments:
Support the cosmetic change for physics minor.


Department Head Signature:
Date:5/3/2021

## Arkansas Tech University DEPARTMENTAL SUPPORT FORM

This form must be completed for every department affected by the course change.
\(\left.$$
\begin{array}{|l|l|}\hline \begin{array}{l}\text { Department Affected: } \\
\text { Mechanical Engineering }\end{array}
$$ \& \begin{array}{c}This department <br>
\square <br>

the supports\end{array} \quad \square does not support\end{array}\right]\)|  |
| :--- |
| Comments: |
|  |

Department Head Signature:



## Geology

The minor in geology is primarily designed for students who are majoring in disciplines where a broader background in geology can aid in recognizing and addressing geological hazards, natural disasters, environmental issues, natural resource management, conservation, and land use planning. The minor in geology requires 20 hours of courses:

- GEOL Electives (11 hours)
- GEOL Electives (9 hours of 3000 or 4000 level)
*No more than one credit hour can be a seminar course or special problem


## Engimeerimg Physics

## update description

The minor in engineermg physics is for engineering students or physical science students wishing to obtain additional background to support their major degree and enhance their employment opportunities. The minor in engineering physics requires 20 hours of courses:

- PHYS Electives (II hours)
- PHYS Electives (9hours of 3000 or 4000 level)
*No more than one credit hour can be a seminar course or special problem


## Physical Science

The minor in physical science is for students wishing to obtain additional background to enhance their employment opportunities. The minor in physical science requires 20 hours of courses:

- Electives ( 11 hours chosen from CHEM, GEOL, PHSC, or PHYS)
- Electives ( 9 hours of 3000 or 4000 level chosen from CHEM, GEOL, PHSC, or PHYS)
*No more than one credit hour can be a seminar course or special problem


## DEGREE AUDIT CHECK LIST <br> (MINOR-ENPH) Engineering Physics

2822-23 2023-24


Final Check:
Min. hours required $\quad 20$
Earned Hrs $\qquad$
to be completed $\qquad$
TOTAL $\qquad$
Must have 2.00 in minor
Must have minimum of 6 hours in residence
Must use same catalog for both major and minor

