



# **Pittsburg State University Faculty Senate Meeting**

**Date:** Monday, October 28, 2019  
**Time:** 3:00 p.m.  
**Location:** Sunflower Room, Overman Student Center

## **AGENDA**

- I. Call to order**
- II. Approval of September 23, 2019 minutes**
- III. Announcements**
  - A. Provost and Vice President of Academic Affairs- Dr. Howard Smith**
  - B. PSU/KNEA Remarks- Grant Moss**
  - C. Student Senate Remarks- Alexis Houser**
  - D. Unclassified Professional Senate Remarks- Brad Stefanoni**
  - E. University Support Staff Remarks- Terry Pierce**
  - F. Faculty Senate Report- Kevin Bracker**
- IV. Committee Reports**

(Reports from committees will begin with Undergraduate Curriculum committee followed by Academic Affairs)

  - A. Academic Affairs Committee—Chair: Steve Cox**
    - Undergraduate Curriculum Subcommittee—**Chair: Nico Prelogar (Cole Shewmake Reporting)**
    - Library Services/Learning Resources Subcommittee—**Chair: Gail Yarick**

- Online and Distance Learning Committee—**Chair: Krissy Lewis (Kevin Bracker Reporting)**
- Academic Honors Subcommittee—**Chair: Janice Jewett (Cliff Morris Reporting)**
- Honors College Subcommittee—**Chair: Rebeca Book**
- Writing Across the Curriculum Subcommittee—**Chair: Alex Binder**
- Diversity and Multicultural Affairs Subcommittee—**Chair: Jason Reid (Kevin Bracker Reporting)**

**B. Student-Faculty Committee—Chair: Daniel Maxwell**

**C. All University Committee—Chair: Jennifer Harris**

**D. Faculty Affairs Committee—Chair: Andrea Kent-McConnaughey**

**E. Constitution Committee—Chair: Mark Johnson**

**F. Pitt State Pathway Committee—Chair: Michelle Hudiburg**

**G. Budget Committee—Chair: Linden Dalecki (Kevin Bracker Reporting)**

**All University Committees or Other Appointments**

- **Academic Honesty Committee—Chair: Cole Shewmake**

**V. Unfinished Business:**

**VI. New Business:**

**VII. Open Forum:**

**VIII. Adjournment**

**Next Faculty Senate Meeting: November 25, 2019 -- 3:00 pm**

**Academic Affairs – No report**

**Undergraduate Curriculum –**

**Library Services – No Report**

**Online and Distance Learning – Will be meeting in November. Otherwise no report.**

**Academic Honors –**

In addition to electing a chair and recorder; we discussed logistics as it relates to communication between the college committees and the Registrars Office with the hopes of streamlining the process and making it more clear for chairs of the college committees. The number of academic honors projects submitted for Fall 2019 totaled approximately 65 which is comparable to other semesters.

**Honors College –**

Honors College Committee met on Sept. 26 at the Overman Student Center with Craig Fuchs, Janis Schiefelbein, Susan Carlson, Jennifer Shewmake, Rebeca Book and Christopher Wernimont present. Michelle Hudiburg and Danielle Rakestraw were not able to make it.

The Honors College Committee is composed of the following:

Member	Department	Email	Extension	Term
1) Carlson, Susan	EML	<a href="mailto:scarlson@pittstate.edu">scarlson@pittstate.edu</a>	4692	2
2) Schiefelbein, Jan	Nursing	<a href="mailto:jschiefelbein@pittstate.edu">jschiefelbein@pittstate.edu</a>	4441	2
3) Book, Rebeca	Eng. Tech.	<a href="mailto:rbook@pittstate.edu">rbook@pittstate.edu</a>	4034	2
4) Hudiberg, Michelle	T & L	<a href="mailto:mhudiburg@pittstate.edu">mhudiburg@pittstate.edu</a>	4507	1
5) Shewmake, Jennifer	COB	<a href="mailto:jshewmake@pittstate.edu">jshewmake@pittstate.edu</a>	4084	1
6) Rakestraw, Danielle	Student (senior)	<a href="mailto:drakestraw@gus.pittstate.edu">drakestraw@gus.pittstate.edu</a>		2
7) Wernimont, Chris	Student (junior)	<a href="mailto:cwernimont@gus.pittstate.edu">cwernimont@gus.pittstate.edu</a>		1
8) Fuchs, Craig	Director, Honors College	<a href="mailto:cfuchs@pittstate.edu">cfuchs@pittstate.edu</a>	4176	
9) Smith, Howard	Vice President, Academic Affairs	<a href="mailto:provost@pittstate.edu">provost@pittstate.edu</a>	4113	

Rebeca Book will be president and Michelle Hudiburg will be recorder/secretary.

Discussed the push to increase the number of applicants and also the diversity if possible. Also discussed the process of admission to Honors College. Options of adding a portfolio or possible video so a student's interests may be better highlighted. Dr. Fuchs will look at other universities where videos are used in the process, but it will not be added this year for PSU.

Next meeting will be late Nov./early Dec. Applications will be received up until Jan. 15th and then will be reviewed with a deadline of Jan. 31st. Feb. 9th will be on-campus reviews with a backup day of Feb. 16th.

**Writing Across the Curriculum** – The WAC committee reviewed 41 submissions for the Writing to Learn best practices grant. They have been sent to the Provost for approval.

### **Diversity and Multicultural Affairs –**

Attendance -- Tatiana Goris, Deatrea Rose, Jason Reid, Cindy Johnson, Browyn Conrad, Jessica Jorgenson Borchert

#### Faculty Diversity Survey

Jason discussed the survey on faculty diversity that was completed last year. He felt we should continue discussing the results. From this survey, we have seen many faculty are not teaching courses that are directly diversity related topics. Despite this, most faculty surveyed do incorporate issues of diversity into their course content. Jason noted that he didn't realize how he teaches diversity through teaching website design and usability, and that is how he brings in diversity.

Deatrea noted it might be interesting to know how many people the survey was sent to and then we could divide the response rate by the number. Cindy noted that 325 total faculty likely received it through email demonstrating a low response rate for the survey. Ideas were discussed about ways of increasing response rate. Deatrea suggested having Deans to send out the survey or have the provost send out the survey.

Tatiana asked how we should use this data. With this, questions rose about why we were collecting this data. Deatrea brought up we are collecting the data for HLC. Because of the amount of data, we decided to brainstorm ways of analyzing the data. The committee went through each question and discussed them separately.

The committee decided to possibly bring forth a workshop or presentation at CTLT and/or during our annual Professional Development day. Deatrea brought up we could do a brown bag around diversity in the classroom. This brown bag could also be linked to the Tilford Group.

#### NSSE

Jason discussed how or if we would want to use this data. Would we want to work with Nora Hatton to create focus groups with students? Jason asked the former chair what his goals were with the NSSE data and he left Jason with some suggestions. The suggestions are listed below:

- Contact Nora Hatton about student focus groups. Nora may have an option for training students to run focus groups.
- Develop goals/outcomes for focus groups
- Based on goals, develop protocol for student focus groups
- Should we use the National Survey of Student Engagement (NSSE) Data for focus groups?

Browyn said that Nora pulls course descriptions to demonstrate to HLC that we do cover diversity in our course content.

### Committee Goals

- All were advised to review the survey data. Think about ways we can use the survey data beyond accreditation purposes.
- Jason will send out an email for the next meeting. The next meeting will focus on what we would like to do with using the data beyond using it for HLC accreditation.

The committee briefly discussed how the current survey data has such a low response rate that it may not be currently ready for a report to HLC. Browyn shared that previous thinking was that the survey could help the accreditation work already being done, but with an 8% response rate there were concerns expressed that it may not be helpful data.

### Ideas for Future projects

Jason asked the committee if anyone had ideas for future projects. The committee felt that we can review the current survey and revise the survey before we have Howard Smith and/or Deans send it out.

### Announcements

Jason asked if anyone had any announcements. None were shared.

Date for next meeting: Friday, November 15

### **Student-Faculty – No report**

### **All-University – No report**

### **Faculty Affairs –**

As of 10/15 approx. \$35,000 of the \$100,000 allotment has been allocated for Priority I travels funding 36 faculty presentations. The committee encourages all colleagues to apply, even for Priority II funding as last year for the first time we did not spend all of our travel funds. With money available we hope to begin awarding Priority II's in the beginning of May instead of waiting until the end of that month.

Sabbatical reviews are in process and the committee will be meeting on Oct. 16th to make their recommendations and letters will be sent out by Oct. 18th.

### **Constitution –**

Constitution Committee Meeting 9/27/19:

Present: March Johnson (Chair); Amy Hite (Recorder); Ruth Monnier; James Whitney

Not Present: Chase Dearing, Hazel Coltharp

Called to Order 11:10 am

Discussion of Action items for vote at FS Senate Meeting, without 2 readings at FS.

Request: Standard, viewable, all action items must be posted prior on FS Website, preferred over Canvas.

This benefits all faculty to review items that will be one reading and vote item at the next FS Meeting.

Constitution Committee Recommends:

Any University Wide Action item for the next Faculty Senate Meeting will be posted for a Standard Viewing period of 28 calendar days prior to the next Faculty Senate meeting. Actionable items must be submitted prior to the 28-day viewing period, to the Registrar’s Office. On the 28<sup>th</sup> Day, the Registrar’s Office will post these on the Faculty Senate website.

28-day university wide viewing of legislative items

Items must be submitted by a committee or senator (dept/school or at large elected).

<b>28 Day Viewing Date to Faculty Senate Website*</b>	<b>Faculty Senate Meeting Date for First Reading and Vote</b>
September 30, 2019	October 28, 2019
October 28, 2019	November 25, 2019
November 11, 2019	December 9, 2019
December 30, 2019	January 27, 2020
January 27, 2020	February 24, 2020
March 2, 2020	March 30, 2020
April 13, 2020	May 11, 2020
August 31, 2020	September 28, 2020

\*Action items for one reading and vote, must be submitted to the Registrar’s Office, prior to this date.

**Pitt State Pathway –**

**Budget Committee – No Report**

**Academic Honesty – Three Maxient Tracking Reports**

**Notes from Lunch Meeting with CFO and VP for Administration Doug Ball**

- Dr. Amber Tankersley expressed some frustrations with the air conditioning issue in the FCS building to start the semester (about 5 weeks without air in Aug/Sept due to a part that went bad). This seems like it was largely a communication issue with the part supplier. HVAC systems are probably the weakest link on the physical side with plumbing second. PSU anticipates these areas being a key investment focus in the upcoming years to strengthen them.
- Doug mentioned that the two biggest challenges were declining enrollment and budget implications associated with that along with implementation of the GUS Cloud System.
- The two biggest opportunities revolved around the same two issues with strategic changes that the university is making in order to address the enrollment/budget issues and the improved data management aspects of the GUS Cloud.
- A long-run concern is related to demographics where one of the leading researchers in college enrollment trends recently discussed the topic. He noted that the drop in enrollment at US higher ed started about 6 years ago and will peak in about 10 years based on demographic factors.
- Another topic raised was how PSU might start to look into taking advantage of innovation in programs and style of offerings. Fort Hays was brought up as an example.
- Academic Partners (the new professional online-MBA program in Kelce) was discussed. In addition to showing strong enrollment, it is also profitable. However, the disclaimer was mentioned that it was profitable because these were new students that would likely not be served

by us otherwise. In areas where a strong online presence is already there, it may not be the case. Also, the revenue is about half that of a traditional student due to the split in revenues with AP.

### **Good Apple Young Alumni Nominations**

Nominations are open for the next "Good Apple" award! Do you know a qualified young alumni?

Each year at Apple Day, Pittsburg State recognizes an outstanding recent graduate as a "Good Apple" who has made an impact in his or her career field or community while showcasing Gorilla pride.

The recipient is featured as a speaker during the Apple Day Celebration, serving as inspiration to current students to go forth and make a similar impact when they leave campus.

Submit your nomination online at

[https://pittsburgstate.formstack.com/forms/good\\_apple\\_nominations](https://pittsburgstate.formstack.com/forms/good_apple_nominations)

Applications are due by midnight on Sunday, Nov. 17, 2019.

Nominations must include the nominee's name, graduation year, current city and state of residence, current employer and occupation, special honors, awards, and achievements, contributions they've made to their employer or community, and the qualities they have that resonate with what it means to be a Gorilla.

### **Pitt State Hosts Kansas Board of Regents Meeting in November**

The monthly KBOR meeting will be held at PSU in November (Nov. 20-21). There will be a session on Thursday afternoon (Time TBD) that will provide faculty a time to discuss any issues on their mind with the Regents.





**Request for Revision to Course**

(Undergraduate Course Numbers through Course Number 699)

Department: ART College: Arts and Sciences

Submission Date: 3/19/19

Contact Person: James Oliver  Faculty member  Chair

Revision Effective: WF/19 (Semester/Year)

Offered: (check all that apply)

- Fall  
 Spring  
 Summer

Is this revision related to, and/or affect, any other departments/college/unit curricula or programs at Pittsburg State University?

Yes  No

*Whether a "yes" or "no" response, please provide an explanation. Provide documentation of any discussions (e.g. copies of e-mails, memos, etc.) that have occurred.*

This course is offered within the Department of Art Curriculum

Purpose/Justification for Revision to Course: In converting Art curriculum to 120 hours. This course must be reduced to 2 hours.

**Existing Course:**

Course Number: ART 441

Title of Course: Art Education: Theory and Practice

Credit Hours: 3.0

Prerequisite: ART 379: Art Education: Elementary

Course Description (as it appears in the current catalog): An overview of the historical and philosophical approaches to art education, including a comprehensive study of current pedagogical theories, research and contemporary issues related to teaching art in PK-12. For art education majors only. Prerequisite: ART 379 Art Education: Elementary. Fall only.

**Proposed Course:**

Course Number: ART 441

Title of Course: Art Education: Theory and Practice

Credit Hours: 2.0

Prerequisite: ART 379: Art Education: Elementary

**Course Description (as it will appear in the next catalog): An overview of the historical and philosophical approaches to art education, including a comprehensive study of current pedagogical theories, research and contemporary issues related to teaching art in PK-12. For art education majors only. Prerequisite: ART 379 Art Education: Elementary.**

## Additional Questions

1. Is this course to be considered for General Education?  Yes  No

If "yes," please indicate the University's General Education Goals met by this course AND the assessment data that will be collected to measure these goals:

\_\_\_\_\_ *Please realize that it will need to gain approval of the General Education Committee.*

2. Will this course be required of any education majors?  Yes  No

If "yes," please realize that it will need to have the approval of the Council for Teacher Education.

3. What additional costs will be required for revising this course (e.g. staffing, equipment, etc.)?

\_\_\_\_\_ *None*

PITTSBURG STATE UNIVERSITY  
LEGISLATIVE PROCESS  
AUTHORIZATION/NOTIFICATION SIGN-OFF SHEET

- Approved: Department Chairperson  
Date 3/19/18 Signature, Department Chairperson James Trufore
- Approved: College Curriculum Committee  
Date 5/2/18 Signature, College Curriculum Committee Chair M. P. Smith
- Approved: Dean of College  
Date 5/2/18 Signature, Dean M. P. Smith
- Approved: General Education Committee (if applicable)  
Date \_\_\_\_\_ Signature, General Education Committee Chair \_\_\_\_\_
- Approved: Council for Teacher Education (if applicable)  
Date 9/4/19 Signature, Council for Teacher Education Chair James Trufore
- Approved: Faculty Senate University Undergraduate Curriculum Committee  
Date 10/14/19 Signature, Undergraduate Curriculum Committee Chair M. P. Smith
- Approved: Faculty Senate  
Date \_\_\_\_\_ Signature, Recording Secretary, Faculty Senate \_\_\_\_\_

Each college curriculum representative will notify their respective college and department(s) of the completion of the approval process.

Originating Department: Please complete this form and upload to the Zimbra Briefcase, "Undergraduate Curriculum Legislation" (within the appropriate College folder, "Preliminary Legislation"), to allow for review and questions. Any modifications should be saved as "original file name.version2.docx" (e.g. MATH 343.version 2.docx) and uploaded as well.

Please print the final version of this form, apply the appropriate signatures, and forward to the Office of the Registrar.

Please Note: This is a 2-3 month process, at least, and is designed to eliminate questions and concerns at the beginning of the process. Any questions/concerns not addressed prior to the College Curriculum Committee and the Faculty Senate University Undergraduate Curriculum Committee, may result in an additional month added to the process.

## Request for Revision to Course

(Undergraduate Course Numbers through Course Number 699)

Department: PHYSICS College: CAS

Submission Date: 3/7/2019

Contact Person: Serif Uran  Faculty member  Chair

Revision Effective: Fall 2019 (Semester/Year)

Offered: (check all that apply)

- Fall  
 Spring  
 Summer

Is this revision related to, and/or affect, any other department's/college's/unit's curricula or programs at Pittsburg State University?

Yes  No

*Whether a "yes" or "no" response, please provide an explanation. Provide documentation of any discussions (e.g. copies of e-mails, memos, etc.) that have occurred.*

The director of teacher education, Jean Dockers, advised us to reduce the credit requirement for 579 course from two to one.

Purpose/Justification for Revision to Course: This reduction would help us to be compliant with 120 credits requirement for BSED in Physics

### Existing Course:

Course Number: 579

Title of Course: Supervised Student Teaching and Follow-Up of Teachers

Credit Hours: 2

Prerequisite: Concurrent enrollment in the professional semester is required.

Course Description (as it appears in the current catalog): 2 hours. Available only to students enrolled in the professional semester. A supervising professor will visit each student teacher. Additional mentoring, outreach, and support are available to first-year teachers who maintain contact with the department. Concurrent enrollment in the professional semester is required. Offered on a Pass-Fail basis only.

### Proposed Course:

Course Number: 579

Title of Course: Supervised Student Teaching and Follow-Up of Teachers

Credit Hours: 1

Prerequisite: Concurrent enrollment in the professional semester is required.

**Course Description (as it will appear in the next catalog): Available only to students enrolled in the professional semester. A supervising professor will visit each student teacher. Additional mentoring, outreach, and support are available to first-year teachers who maintain contact with the department. Concurrent enrollment in the professional semester is required. Offered on a Pass-Fail basis only.**

## Additional Questions

1. Is this course to be considered for General Education?  Yes  No

If "yes," please indicate the University's General Education Goals met by this course AND the assessment data that will be collected to measure these goals:

\_\_\_\_\_ *Please realize that it will need to gain approval of the General Education Committee.*

2. Will this course be required of any education majors?  Yes  No  
*If "yes," please realize that it will need to have the approval of the Council for Teacher Education.*
3. What additional costs will be required for revising this course (e.g. staffing, equipment, etc.)?  
None

**PITTSBURG STATE UNIVERSITY  
LEGISLATIVE PROCESS  
AUTHORIZATION/NOTIFICATION SIGN-OFF SHEET**

- Approved: Department Chairperson  
Date 4/3/19 Signature, Department Chairperson [Signature]
- Approved: College Curriculum Committee  
Date 5/2/19 Signature, College Curriculum Committee Chair [Signature]
- Approved: Dean of College  
Date 5/2/19 Signature, Dean [Signature]
- Approved: General Education Committee (if applicable)  
Date \_\_\_\_\_ Signature, General Education Committee Chair \_\_\_\_\_
- Approved: Council for Teacher Education (if applicable)  
Date 9/4/19 Signature, Council for Teacher Education Chair [Signature]
- Approved: Faculty Senate University Undergraduate Curriculum Committee  
Date 10/14/19 Signature, Undergraduate Curriculum Committee Chair [Signature]
- Approved: Faculty Senate  
Date \_\_\_\_\_ Signature, Recording Secretary, Faculty Senate \_\_\_\_\_

Each college curriculum representative will notify their respective college and department(s) of the completion of the approval process.

Originating Department: Please complete this form and upload to the Zimbra Briefcase, "Undergraduate Curriculum Legislation" (within the appropriate College folder, "Preliminary Legislation"), to allow for review and questions. Any modifications should be saved as "original file name.version2.docx" (e.g. MATH 343.version 2.docx) and uploaded as well.

Please print the final version of this form, apply the appropriate signatures, and forward to the Office of the Registrar.

Please Note: This is a 2-3 month process, at least, and is designed to eliminate questions and concerns at the beginning of the process. Any questions/concerns not addressed prior to the College Curriculum Committee and the Faculty Senate University Undergraduate Curriculum Committee, may result in an additional month added to the process.



**Request for Deletion of Curriculum**

Deletion of:  Major  Minor  Emphasis  Certificate

Department: PHYSICS College: CAS

Submission Date: 3/7/2019

Revision Effective: Fall, 2019  
(Year)

Contact Person: Serif Uzun  Faculty member  Chair

Name of Existing Major or Minor/Emphasis/Certificate: Bachelor's of Science in Education(BSE) Physics

Rationale for Deletion: The BSE Physics degree will be converted to an emphasis area under BS degree in Physics. Satisfying the Regent's minima in this degree has been very challenging not only for our department but also for other physics departments in other Kansas higher education institutions.

Will this deletion affect any other department's/college's/unit's curricula or programs at Pittsburg State University?  
 Yes  No

*Whether a "yes" or "no" response, please provide an explanation. Provide documentation of any discussions (e.g. copies of e-mails, memos, etc.) that have occurred.*  
Making BSE Physics degree an emphasis does not change the total 120 credit hour requirement.

Will this deletion involve specific General Education courses?  Yes  No  
*If "yes," please realize that it will need to gain approval of the General Education Committee.*

Will this deletion affect any education majors?  Yes  No  
*If "yes," please realize that it will need to have the approval of the Council for Teacher Education.*

PITTSBURG STATE UNIVERSITY  
LEGISLATIVE PROCESS  
AUTHORIZATION/NOTIFICATION SIGN-OFF SHEET

Approved: Department Chairperson  
Date 2/9/19 Signature, Department Chairperson [Signature]

Approved: College Curriculum Committee  
Date 5/2/19 Signature, College Curriculum Committee Chair MC Parnath

Approved: Dean of College  
Date 5/2/19 Signature, Dean MC Parnath

Approved: General Education Committee (if applicable)  
Date \_\_\_\_\_ Signature, General Education Committee Chair \_\_\_\_\_

Approved: Council for Teacher Education (if applicable)  
Date 9/14/19 Signature, Council for Teacher Education Chair James Truefore

Approved: Faculty Senate University Undergraduate Curriculum Committee  
Date 10/14/19 Signature, Undergraduate Curriculum Committee Chair [Signature]

Approved: Faculty Senate  
Date \_\_\_\_\_ Signature, Recording Secretary, Faculty Senate \_\_\_\_\_

Final approved packet forwarded to Provost's office.  
Date \_\_\_\_\_ Signature, Recording Secretary, Faculty Senate \_\_\_\_\_

Notification to COCAO/Kansas Board of Regents: \_\_\_\_\_ Date: \_\_\_\_\_

Each college curriculum representative will notify their respective college and department(s) of the completion of the deletion.

Originating Department(s): After completing this form, in its entirety, please upload it to the Zimbra Briefcase, "Undergraduate Curriculum Legislation" (within the appropriate College folder, "Preliminary Legislation"), to allow for review and questions. Any modifications should be saved as "original file name.version2.docx" and uploaded as well.

Following final College Curriculum Committee approval, please print the final version of this form and a memo on department letterhead, apply the appropriate signatures, and forward to the Office of the Registrar.

Following Faculty Senate Approval, SUBMIT SIGN-OFF SHEET AND the MEMO TO THE OFFICE OF THE PROVOST (220 RUSS HALL)

Please Note: This is at least a 2-3 month process from the time of first submission and is designed to eliminate concerns and questions at the beginning of the process. Any questions/concerns not addressed prior to the review by the College Curriculum Committee and the Faculty Senate University Undergraduate Curriculum Committee, may result in an additional month added to the process, before it is sent to the Kansas Board of Regents for informational purposes.

**Request for New Minor/Emphasis/Certificate**

Proposal for a New:  Minor  Emphasis  Certificate

Department: PHYS College: CAS This program is to be offered 50% or more online as a Hybrid \_\_\_\_\_  
 This program is to be offered fully online \_\_\_\_\_

Submission Date: 3/7/2019 (Year) Effective: Fall, 2019

Contact Person: Serif Uran  Faculty member  Chair

Title of Proposed Minor/Emphasis /Certificate: Emphasis in Physics Education

Purpose/Justification for Minor/Emphasis/Certificate: Transitioning BSE physics degree to an emphasis area under BS in Physics. This emphasis will be for students who are interested in teaching physics.

Is this new minor/emphasis/certificate proposal related to, and/or may affect, any degree program or minor/emphasis/certificate at any other Regent university?  
 Yes  No

*Whether a "yes" or "no" response, please provide an explanation.*  
There will no longer be a BSE physics degree in our department, but students can still obtain a BS in Physics degree with emphasis in physics education.

Is this new minor/emphasis/certificate proposal related to, and/or may affect, any other department's/ college's/ unit's curricula or programs at Pittsburg State University?  
 Yes  No

*Whether a "yes" or "no" response, please provide an explanation. Provide documentation of any discussions (e.g. copies of e-mails, memos, etc.) that have occurred.*  
The education component of the degree will still be taught by the College of Education.

Existing Major or Minor/Emphasis/Certificate  
Copy and paste the existing curriculum as it currently appears in the online catalog:

Core Physics Courses (39 hours)

- (a) Physics  
PHYS 500: Mathematical Physics .....3  
PHYS 510: Analytical Mechanics I .....3  
PHYS 512: Electricity and Magnetism I .....3  
PHYS 516: Modern Physics I .....3  
PHYS 530: Intermediate Physics Laboratory ( ) .....3  
PHYS 699: Senior Review and Assessment .....1

(b) Other  
 Request for New Minor/Emphasis/Certificate- Revised Summer  
 2013

<u>CHEM 215: General Chemistry I</u> .....	<u>3</u>
<u>and CHEM 216: General Chemistry I Laboratory</u> .....	<u>2</u>
<u>CHEM 225: General Chemistry II</u> .....	<u>3</u>
<u>and CHEM 226: General Chemistry II Laboratory</u> .....	<u>2</u>
<u>MATH 150: Calculus I</u> .....	<u>5</u>
<u>MATH 155: Calculus II</u> .....	<u>5</u>
<u>CIS 230: Introduction to Programming</u> .....	<u>3</u>
<u>or CIS 240: Intermediate Programming</u> .....	<u>3</u>

Choose one area of emphasis from the list below

Bachelor of Science Degree with a Major in Physics: Professional Emphasis (33 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I</u> .....	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I</u> .....	<u>1</u>
<u>PHYS 105: Engineering Physics II</u> .....	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II</u> .....	<u>1</u>
<u>PHYS 532: Electronic Circuits I</u> .....	<u>3</u>
<u>PHYS 612: Electricity and Magnetism II</u> .....	<u>3</u>
<u>PHYS 691: Senior Research Project</u> .....	<u>2</u>
<u>PHYS 714: Statistical Thermodynamics</u> .....	<u>3</u>
<u>PHYS 716: Introductory Quantum Mechanics</u> .....	<u>3</u>

(b) Electives

Choose three hours of upper-division electives from physics, mathematics, chemistry or technology subject to the approval of the Physics Department.

(c) Mathematics

<u>MATH 253: Calculus III</u> .....	<u>3</u>
<u>MATH 553: Differential Equations</u> .....	<u>3</u>

The Professional Physics emphasis area is for students seeking further study in graduate school. A minor in Mathematics is recommended.

Bachelor of Science Degree with a Major in Physics: Solid State Physics Emphasis (33 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I</u> .....	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I</u> .....	<u>1</u>
<u>PHYS 105: Engineering Physics II</u> .....	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II</u> .....	<u>1</u>

<u>PHYS 504: Solid State Electronic Devices .....</u>	<u>3</u>
<u>or PHYS 532: Electronic Circuits I .....</u>	<u>3</u>
<u>PHYS 691: Senior Research Project .....</u>	<u>2</u>
<u>PHYS 714: Statistical Thermodynamics .....</u>	<u>3</u>
<u>PHYS 716: Introductory Quantum Mechanics .....</u>	<u>3</u>
<u>PHYS 742: Solid State Physics .....</u>	<u>3</u>

(b) Electives

Choose three hours of upper-division electives from physics, mathematics, chemistry or technology subject to the approval of the Physics Department.

(c) Mathematics

<u>MATH 253: Calculus III .....</u>	<u>3</u>
<u>MATH 553: Differential Equations .....</u>	<u>3</u>

The Solid State Physics emphasis area is for students seeking further study in graduate school. A minor in Mathematics is recommended.

Bachelor of Science Degree with a Major in Physics: Astrophysics Emphasis (33 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>
<u>PHYS 502: Computational Physics .....</u>	<u>3</u>
<u>or PHYS 518: Physical Optics .....</u>	<u>3</u>
<u>PHYS 575: Introductory Astrophysics .....</u>	<u>3</u>
<u>PHYS 691: Senior Research Project .....</u>	<u>2</u>
<u>PHYS 716: Introductory Quantum Mechanics .....</u>	<u>3</u>
<u>PHYS 775: Advanced Astrophysics .....</u>	<u>3</u>

(b) Electives

Choose three hours of upper-division electives from physics, mathematics, chemistry or technology subject to the approval of the Physics Department.

(c) Mathematics

<u>MATH 253: Calculus III .....</u>	<u>3</u>
<u>MATH 553: Differential Equations .....</u>	<u>3</u>

The Astrophysics emphasis area is for students seeking further study in graduate school. A minor in Mathematics is recommended.

Bachelor of Science Degree with a Major in  
Physics: Polymer Physics Emphasis (27 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>or PHYS 100: College Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>or PHYS 101: College Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>

(b) Physics Electives

Six hours of physics electives with course numbers  
greater than 500 subject to the approval of the Physics  
Department.

(c) Other

<u>CHEM 360: Introduction to Polymer Science and Technology .....</u>	<u>3</u>
<u>CHEM 625: Polymer Synthesis and Characterizations .....</u>	<u>3</u>
<u>CHEM 626: Polymer Synthesis and Characterizations Laboratory .....</u>	<u>2</u>
<u>CHEM 680: Physical Properties of Polymers .....</u>	<u>3</u>

The BS in Physics with an Emphasis in Polymer Physics is  
an ideal double major with a BS in Polymer Chemistry or  
with a BSET in Plastics Engineering Technology.

Bachelor of Science Degree with a Major in  
Physics: Engineering Technology Emphasis  
(21-22 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>or PHYS 100: College Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>or PHYS 101: College Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>

(b) Physics Electives

Six hours of physics electives with course numbers  
greater than 500 subject to the approval of the Physics  
Department.

(c) Other (Choose two from the following)

<u>EET 349: Analog Integrated Circuits .....</u>	<u>3</u>
<u>EET 447: Communications Theory and Circuits .....</u>	<u>3</u>
<u>EET 449: Programmable Logic Devices .....</u>	<u>3</u>

<u>EET 546: Electronic Controls .....</u>	<u>3</u>
<u>MECET 420: Kinematics .....</u>	<u>2</u>
<u>MECET 423: Mechanics of Materials .....</u>	<u>3</u>
<u>MECET 524: Fluid Mechanics .....</u>	<u>3</u>
<u>MECET 682: Heat Transfer .....</u>	<u>3</u>

The BS in Physics with an Emphasis in Engineering Technology is an ideal double major with a BSET in either Electronics Engineering Technology or Mechanical Engineering Technology.

Bachelor of Science Degree with a Major in Physics: Customized Emphasis (22 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>or PHYS 100: College Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>or PHYS 101: College Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>

(b) Physics Electives

Six hours of physics electives with course numbers greater than 500 subject to the approval of the Physics Department.

(c) Other

Six hours of upper-division electives from physics, mathematics, chemistry, or technology subject to the approval of the Physics Department.

The BS in Physics with a Customized Emphasis is an ideal double major with a Bachelor of Science in Mathematics or Chemistry; a BBA in Computer Information Systems or a BSET in Technology. This emphasis area also fits well for pre-Medical and Healthrelated study areas.

Minor Requirements

A minor consists of 20 hours of course work in a field different from the major field of study. Physics students customarily minor in chemistry or mathematics, but may want to select other minors as a way to improve employment options.

Bachelor of Science in Education Degree with a Major in Physics

Basic Skills (9 hours)

<u>COMM 207: Speech Communication .....</u>	<u>3</u>
<u>ENGL 101: English Composition .....</u>	<u>3</u>
<u>ENGL 190: Honors English Composition .....</u>	<u>3</u>
<u>or ENGL 299: Introduction to Research Writing .....</u>	<u>3</u>

MATH 113 is satisfied by MATH 150 and 155  
requirement listed in content area of the BSEd in  
Physics.

A grade of "C" or better in each of the basic skills  
courses is required.

General Education Electives (23-29 hours)Sciences\*\* (0 hours)

\*\*Sciences satisfied by BIOL 111/112 and PHYS 104/130  
courses listed in content area.

Social Studies (Select one)

<u>SOC 100: Introduction to Sociology .....</u>	<u>3</u>
<u>WGS 200: Introduction to Women's Studies .....</u>	<u>3</u>

Political Studies (Select one) (3 hours)

<u>POLS 101: U.S. Politics .....</u>	<u>3</u>
<u>POLS 103: Comparative Political Institutions .....</u>	<u>3</u>

Producing and Consuming (Select CIS and  
one from the remaining two categories)

Economy

<u>ECON 191: Issues in Today's Economy .....</u>	<u>3</u>
<u>FCS 230: Consumer Education and Personal Finance .....</u>	<u>3</u>

Technology

<u>EET 247: Computer Programming for Electronic Systems .....</u>	<u>3</u>
<u>GT 190: Introduction to Technological Systems .....</u>	<u>2</u>
<u>GT 350: Technology and Civilization .....</u>	<u>3</u>
<u>EDTH 330: Technology for the Classroom .....</u>	<u>3</u>
<u>TE 551: Integrated Technology for Educators .....</u>	<u>3</u>
<u>TM 350: Societal Influence of Technology .....</u>	<u>3</u>

Business

CIS (satisfied by CIS 230 requirement listed in content  
area)

Fine Arts and Aesthetic Studies (select one)

<u>ART 155: Printmaking and Paper Arts .....</u>	<u>3</u>
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<u>ART 178: Introduction to the Visual Arts .....</u>	<u>3</u>
<u>ART 188: The Designed World .....</u>	<u>3</u>
<u>ART 217: Crafts I .....</u>	<u>3</u>
<u>ART 222: Jewelry Design I .....</u>	<u>3</u>
<u>ART 233: Drawing I .....</u>	<u>3</u>
<u>ART 244: Ceramics I .....</u>	<u>3</u>
<u>ART 266: Sculpture I .....</u>	<u>3</u>
<u>ART 277: Painting I .....</u>	<u>3</u>
<u>ART 288: Introduction to Art History I .....</u>	<u>3</u>
<u>ART 289: Introduction to Art History II .....</u>	<u>3</u>
<u>ART 311: Art Education .....</u>	<u>3</u>
<u>ART 351: Printmaking, Papermaking, Bookarts and the Letterpress .....</u>	<u>3</u>
<u>ART 430: Automotive: Art and Design .....</u>	<u>3</u>
<u>COMM 105: Performance Appreciation .....</u>	<u>3</u>
<u>COMM 205: Performance Studies .....</u>	<u>3</u>
<u>COMM 395: Theatre History ( ) .....</u>	<u>3</u>
<u>ENGL 250: Introduction to Creative Writing .....</u>	<u>3</u>
<u>HHP 151: Dance Appreciation .....</u>	<u>3</u>
<u>MUSIC 120: Music Appreciation ( ) .....</u>	<u>3</u>
<u>MUSIC 121: Introduction to Music Literature .....</u>	<u>2</u>

Cultural Studies (Select one)

<u>ANTH 101: Introduction to Cultural Anthropology .....</u>	<u>3</u>
<u>MLL 114: Chinese Language and Culture I .....</u>	<u>3</u>
<u>MLL 124: French Language and Culture I .....</u>	<u>3</u>
<u>MLL 154: Spanish Language and Culture I .....</u>	<u>3</u>
<u>MLL 184: Russian Language and Culture I .....</u>	<u>3</u>
<u>MLL 194: Korean Language and Culture I .....</u>	<u>3</u>
<u>GEOG 106: World Regional Geography .....</u>	<u>3</u>
<u>GEOG 300: Elements of Geography .....</u>	<u>3</u>
<u>GEOG 304: Human Geography .....</u>	<u>3</u>
<u>WGS 399: Global Women's Issues .....</u>	<u>3</u>

Health and Well Being (4-6 hours)

Psychological

<u>PSYCH 155: General Psychology .....</u>	<u>3</u>
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Physical (Select one)

<u>FCS 203: Nutrition and Health .....</u>	<u>3</u>
<u>FCS 301: Nutrition .....</u>	<u>3</u>
<u>HHP 150: Lifetime Fitness Concepts .....</u>	<u>1</u>
<u>NURS 303: Introduction to Public Health .....</u>	<u>3</u>

Human Heritage (Select one from two of  
the following three categories)

History

HIST 101: World History to 1500 .....	3
HIST 102: World History from 1500 .....	3
HIST 201: American History to 1865 .....	3
HIST 202: American History from 1865 .....	3

Literature

ENGL 113: General Literature .....	3
ENGL 114: General Literature (Genre) .....	3
ENGL 116: General Literature (Theme) .....	3
ENGL 120: Literature and Film .....	3
ENGL 315: Mythology .....	3
ENGL 320: Literature and Film .....	3

Philosophy

PHIL 103: Introduction to Philosophy .....	3
PHIL 105: Ethics .....	3
PHIL 112: Biomedical Ethics .....	3
PHIL 113: Business Ethics .....	3
PHIL 114: Environmental Ethics .....	3
PHIL 207: Critical Thinking .....	3
PHIL 208: Logic .....	3
PHIL 231: World Religions .....	3

Professional Studies Component\*

In addition to the professional education courses listed below, the student must complete the courses for the teaching specialty for physics.

Teaching and Learning Theory with Laboratory and Clinical Experience

EDUC 261: Explorations in Education .....	3
PSYCH 263: Developmental Psychology .....	3
PSYCH 357: Educational Psychology .....	3
PHYS 479: Techniques for Teaching Physics .....	3
SPED 510: Overview of Special Education .....	3
EDUC 520: Methods and Materials for Academic Literacy .....	3

\*See Admission to Professional Semester for professional education grade point requirements.

PSYCH 357, PHYS 479, and EDUC 520 require admission to Teacher Education prior to enrollment in the courses.

Professional Semester (17 hours)

EDUC 458: Methods and Curriculum .....	3
EDUC 462: Secondary and Middle Level Education .....	2

<u>EDUC 464: Foundations of Measurement and Evaluation .....</u>	<u>2</u>
<u>EDUC 480: Supervised Teaching in the Secondary School .....</u>	<u>3</u>
<u>EDUC 482: Supervised Teaching in the Secondary School .....</u>	<u>5</u>
<u>PHYS 579: Supervised Student Teaching and Follow-Up of Teachers .....</u>	<u>2</u>

#### Content for the Teaching Specialty: Physics

(61 hours)

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>
<u>PHYS 160: Physical Geology .....</u>	<u>3</u>
<u>PHYS 375: Solar System Astronomy .....</u>	<u>3</u>
<u>or PHYS 575: Introductory Astrophysics .....</u>	<u>3</u>
<u>PHYS 516: Modern Physics I .....</u>	<u>3</u>
<u>PHYS 530: Intermediate Physics Laboratory ( ) .....</u>	<u>3</u>
<u>PHYS 532: Electronic Circuits I .....</u>	<u>3</u>
<u>PHYS 569: Laboratory Assistant Practicum .....</u>	<u>2</u>
<u>PHYS 691: Senior Research Project .....</u>	<u>2</u>
<u>PHYS 699: Senior Review and Assessment .....</u>	<u>1</u>
<u>CHEM 215: General Chemistry I .....</u>	<u>3</u>
<u>and CHEM 216: General Chemistry I Laboratory .....</u>	<u>2</u>
<u>CHEM 225: General Chemistry II .....</u>	<u>3</u>
<u>and CHEM 226: General Chemistry II Laboratory .....</u>	<u>2</u>
<u>MATH 150: Calculus I .....</u>	<u>5</u>
<u>MATH 155: Calculus II .....</u>	<u>5</u>
<u>BIOL 111: General Biology .....</u>	<u>3</u>
<u>and BIOL 112: General Biology Laboratory .....</u>	<u>2</u>
<u>CIS 230: Introduction to Programming .....</u>	<u>3</u>

- One additional upper-division physics course (3 hours)

Students planning to teach should become familiar with the current regulations for licensure of school personnel prepared by the State Board of Education. Information concerning these regulations may be obtained from the Director of Teacher Education, 110 Hughes Hall, Pittsburg State University.

#### Minor Requirements

Students preparing to teach physics must select a minor. The Earth and Space Science Minor is recommended for students wishing to obtain Earth and Space Science Licensure.

#### Minor in Earth and Space Science

*Request for New Minor/Emphasis/Certificate- Revised Summer 2013*

Earth and Space Science Minor (22 hours)

PHYS 160: Physical Geology .....	3
and PHYS 165: Physical Geology Laboratory .....	1
PHYS 166: Meteorology .....	3
and PHYS 167: Meteorology Laboratory .....	1
PHYS 175: Descriptive Astronomy .....	3
or PHYS 375: Solar System Astronomy .....	3
and PHYS 176: Astronomy Laboratory .....	1

An additional 10 hours from any of the following courses (when not used as part of the core)

BIOL 304: Soil Ecology .....	3
BIOL 330: Principles of Ecology .....	3
BIOL 515: Stream Ecology .....	4
BIOL 537: Regional Natural History .....	3
PHYS 175: Descriptive Astronomy .....	3
PHYS 375: Solar System Astronomy .....	3
PHYS 540: Topics in Physics ( ) .....	1-3
PHYS 541: Topics in Astronomy ( ) .....	1-3
PHYS 542: Topics in Earth Science ( ) .....	1-3
PHYS 575: Introductory Astrophysics .....	3
GEOG 302: Introduction to Environmental Geography .....	3
GEOG 303: Geographic Information Systems I .....	4
GEOG 403: Geographic Information Systems II .....	4
GEOG 502: Global Environmental Change .....	3

Topics courses: PHYS 540, PHYS 541 and PHYS 542 may be repeated if topic is different.

Proposed Minor/Emphasis/Certificate

List below, the proposed curriculum as you wish it to appear in the online catalog:

Core Physics Courses (39 hours) (Except for Emphasis in Physics Education)(a) Physics

PHYS 500: Mathematical Physics .....	3
PHYS 510: Analytical Mechanics I .....	3
PHYS 512: Electricity and Magnetism I .....	3
PHYS 516: Modern Physics I .....	3
PHYS 530: Intermediate Physics Laboratory ( ) .....	3

PHYS 699: Senior Review and Assessment .....1

(b) Other

CHEM 215: General Chemistry I .....3

and CHEM 216: General Chemistry I Laboratory .....2

CHEM 225: General Chemistry II .....3

and CHEM 226: General Chemistry II Laboratory .....2

MATH 150: Calculus I .....5

MATH 155: Calculus II .....5

CIS 230: Introduction to Programming .....3

or CIS 240: Intermediate Programming .....3

Choose one area of emphasis from the list below

Bachelor of Science Degree with a Major in Physics: Professional Emphasis (33 hours)

(a) Physics

PHYS 104: Engineering Physics I .....4

and PHYS 130: Elementary Physics Laboratory I .....1

PHYS 105: Engineering Physics II .....4

and PHYS 131: Elementary Physics Laboratory II .....1

PHYS 532: Electronic Circuits I .....3

PHYS 612: Electricity and Magnetism II .....3

PHYS 691: Senior Research Project .....2

PHYS 714: Statistical Thermodynamics .....3

PHYS 716: Introductory Quantum Mechanics .....3

(b) Electives

Choose three hours of upper-division electives from physics, mathematics, chemistry or technology subject to the approval of the Physics Department.

(c) Mathematics

MATH 253: Calculus III .....3

MATH 553: Differential Equations .....3

The Professional Physics emphasis area is for students seeking further study in graduate school. A minor in Mathematics is recommended.

Bachelor of Science Degree with a Major in Physics: Solid State Physics Emphasis (33 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>
<u>PHYS 504: Solid State Electronic Devices .....</u>	<u>3</u>
<u>or PHYS 532: Electronic Circuits I .....</u>	<u>3</u>
<u>PHYS 691: Senior Research Project .....</u>	<u>2</u>
<u>PHYS 714: Statistical Thermodynamics .....</u>	<u>3</u>
<u>PHYS 716: Introductory Quantum Mechanics .....</u>	<u>3</u>
<u>PHYS 742: Solid State Physics .....</u>	<u>3</u>

(b) Electives

Choose three hours of upper-division electives from physics, mathematics, chemistry or technology subject to the approval of the Physics Department.

(c) Mathematics

<u>MATH 253: Calculus III .....</u>	<u>3</u>
<u>MATH 553: Differential Equations .....</u>	<u>3</u>

The Solid State Physics emphasis area is for students seeking further study in graduate school. A minor in Mathematics is recommended.

Bachelor of Science Degree with a Major in Physics: Astrophysics Emphasis (33 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>
<u>PHYS 502: Computational Physics .....</u>	<u>3</u>
<u>or PHYS 518: Physical Optics .....</u>	<u>3</u>
<u>PHYS 575: Introductory Astrophysics .....</u>	<u>3</u>
<u>PHYS 691: Senior Research Project .....</u>	<u>2</u>
<u>PHYS 716: Introductory Quantum Mechanics .....</u>	<u>3</u>
<u>PHYS 775: Advanced Astrophysics .....</u>	<u>3</u>

(b) Electives

Choose three hours of upper-division electives from physics, mathematics, chemistry or technology subject to the approval of the Physics Department.

(c) Mathematics

<u>MATH 253: Calculus III .....</u>	<u>3</u>
<u>MATH 553: Differential Equations .....</u>	<u>3</u>

The Astrophysics emphasis area is for students seeking further study in graduate school. A minor in Mathematics is recommended.

Bachelor of Science Degree with a Major in Physics: Polymer Physics Emphasis (27 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>or PHYS 100: College Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>or PHYS 101: College Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>

(b) Physics Electives

Six hours of physics electives with course numbers greater than 500 subject to the approval of the Physics Department.

(c) Other

<u>CHEM 360: Introduction to Polymer Science and Technology .....</u>	<u>3</u>
<u>CHEM 625: Polymer Synthesis and Characterizations .....</u>	<u>3</u>
<u>CHEM 626: Polymer Synthesis and Characterizations Laboratory .....</u>	<u>2</u>
<u>CHEM 680: Physical Properties of Polymers .....</u>	<u>3</u>

The BS in Physics with an Emphasis in Polymer Physics is an ideal double major with a BS in Polymer Chemistry or with a BSET in Plastics Engineering Technology.

Bachelor of Science Degree with a Major in Physics: Engineering Technology Emphasis (21-22 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>or PHYS 100: College Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>or PHYS 101: College Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>

(b) Physics Electives

Six hours of physics electives with course numbers greater than 500 subject to the approval of the Physics Department.

(c) Other (Choose two from the following)

<u>EET 349: Analog Integrated Circuits .....</u>	<u>3</u>
<u>EET 447: Communications Theory and Circuits .....</u>	<u>3</u>
<u>EET 449: Programmable Logic Devices .....</u>	<u>3</u>
<u>EET 546: Electronic Controls .....</u>	<u>3</u>
<u>MECET 420: Kinematics .....</u>	<u>2</u>
<u>MECET 423: Mechanics of Materials .....</u>	<u>3</u>
<u>MECET 524: Fluid Mechanics .....</u>	<u>3</u>
<u>MECET 682: Heat Transfer .....</u>	<u>3</u>

The BS in Physics with an Emphasis in Engineering Technology is an ideal double major with a BSET in either Electronics Engineering Technology or Mechanical Engineering Technology.

Bachelor of Science Degree with a Major in Physics: Customized Emphasis (22 hours)

(a) Physics

<u>PHYS 104: Engineering Physics I .....</u>	<u>4</u>
<u>or PHYS 100: College Physics I .....</u>	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I .....</u>	<u>1</u>
<u>PHYS 105: Engineering Physics II .....</u>	<u>4</u>
<u>or PHYS 101: College Physics II .....</u>	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II .....</u>	<u>1</u>

(b) Physics Electives

Six hours of physics electives with course numbers greater than 500 subject to the approval of the Physics Department.

(c) Other

Six hours of upper-division electives from physics, mathematics, chemistry, or technology subject to the approval of the Physics Department.

The BS in Physics with a Customized Emphasis is an ideal double major with a Bachelor of Science in Mathematics or Chemistry; a BBA in Computer Information Systems or a BSET in Technology. This emphasis area also fits well for pre-Medical and Healthrelated study areas.

Bachelor of Science Degree with a Major in Physics: Emphasis in Physics Education (56 hours)

Instead of the core physics courses used by the other emphases, the physics education one requires the following courses:

(a) Physics



<u>PHYS 104: Engineering Physics I</u> .....	<u>4</u>
<u>and PHYS 130: Elementary Physics Laboratory I</u> .....	<u>1</u>
<u>PHYS 105: Engineering Physics II</u> .....	<u>4</u>
<u>and PHYS 131: Elementary Physics Laboratory II</u> .....	<u>1</u>
<u>PHYS 160: Physical Geology</u> .....	<u>3</u>
<u>PHYS 375: Solar System Astronomy</u> .....	<u>3</u>
<u>or PHYS 575: Introductory Astrophysics</u> .....	<u>3</u>
<u>PHYS 516: Modern Physics I</u> .....	<u>3</u>
<u>PHYS 530: Intermediate Physics Laboratory ( )</u> .....	<u>3</u>
<u>PHYS 532: Electronic Circuits I</u> .....	<u>3</u>
<u>PHYS 569: Laboratory Assistant Practicum</u> .....	<u>2</u>
<u>PHYS 691: Senior Research Project</u> .....	<u>2</u>
<u>PHYS 699: Senior Review and Assessment</u> .....	<u>1</u>

b) Mathematics

<u>MATH 150: Calculus I</u> .....	<u>5</u>
<u>MATH 155: Calculus II</u> .....	<u>5</u>

c) Other

<u>CHEM 215: General Chemistry I</u> .....	<u>3</u>
<u>and CHEM 216: General Chemistry I Laboratory</u> .....	<u>2</u>
<u>CHEM 225: General Chemistry II</u> .....	<u>3</u>
<u>and CHEM 226: General Chemistry II Laboratory</u> .....	<u>2</u>
<u>or (Select either CHEM 225/226 or BIOL 111/112 combination)</u>	
<u>BIOL 111: General Biology</u> .....	<u>3</u>
<u>and BIOL 112: General Biology Laboratory</u> .....	<u>2</u>
<u>CIS 230: Introduction to Programming</u> .....	<u>3</u>

• One additional upper-division physics course (3hours)

Students planning to teach should become familiar with the current regulations for licensure of school personnel prepared by the State Board of Education. Information concerning these regulations may be obtained from the Director of Teacher Education, 110 Hughes Hall, Pittsburg State University.

Professional Studies Component\*

In addition to the teaching specialty for physics courses listed above, the student must complete the courses for the professional education component listed below.

Teaching and Learning Theory with Laboratory and Clinical Experience

<u>EDUC 261: Explorations in Education</u> .....	<u>3</u>
<u>PSYCH 263: Developmental Psychology</u> .....	<u>3</u>
<u>PSYCH 357: Educational Psychology</u> .....	<u>3</u>
<u>EDUC 307: Clinical Experience</u> .....	<u>1</u>
<u>EDUC 345: Internship for Secondary</u> .....	<u>1</u>

PHYS 479: Techniques for Teaching Physics .....3  
SPED 510: Overview of Special Education .....3  
EDUC 520: Methods and Materials for Academic Literacy .....3

\*See Admission to Professional Semester for professional education grade point requirements.

PSYCH 357, PHYS 479, and EDUC 520 require admission to Teacher Education prior to enrollment in the courses.

Professional Semester (15 hours)

EDUC 458: Methods and Curriculum .....3  
EDUC 464: Foundations of Measurement and Evaluation .....2  
EDUC 475: Supervised Clinical Experience .....9  
PHYS 579: Supervised Student Teaching and Follow-Up of Teachers.....1

Minor Requirements

A minor is required for every emphasis except for physics education one.

A minor consists of 20 hours of course work in a field different from the major field of study. Physics students customarily minor in chemistry or mathematics, but may want to select other minors as a way to improve employment options.

PS: Since we have a KBOR approved BS (Physics) degree program, we do not need to submit the form mentioned in the box below.

Please complete the Kansas Board of Regent forms located at [http://www.kansasregents.org/academic affairs/new program approval](http://www.kansasregents.org/academic%20affairs/new%20program%20approval) and list the proposed curriculum for the minor/emphasis/concentration, in section 3 (III) of the forms. Please input the proposed curriculum **as you wish it to appear in the next catalog**. If you have any questions about the KBOR forms, please contact the Provost's administrative officer at x4113.

## Additional Questions

1. Additional resources required (e.g. library or multimedia resources, technology, space, major expense, etc.):  
None

2. Will any additional student fees be required (e.g. equipment, clothing, travel, licensing, etc.)?  
 Yes  No *If "yes," please realize that it will need to gain approval of the President's Council.*

Please give the rationale for additional student fees:  
N/A

3. Will this minor/emphasis/certificate have specific General Education courses required?  
 Yes  No  
*Please realize that it will need to gain approval of the General Education Committee.*

4. Will this minor/emphasis/certificate affect any education majors?  Yes  No  
*If "yes," please realize that it will need to have the approval of the Council for Teacher Education.*

5. What additional costs will be required for this minor/emphasis/certificate (e.g. staffing, equipment, etc.)?  
None

## Additional Questions for certificate only:

- Are students pursuing only this certificate eligible for federal financial assistance based on federal guidelines? (minimum of 24 hours)  Yes  No
- Does the course content contained within this certificate provide relevance to employment opportunities or meet professional objectives for the student?  Yes  No

*If "yes," to both questions, it is the department's responsibility to send a copy of this legislation form to the Director of Financial Assistance to initiate Department of Education approval.*



PITTSBURG STATE UNIVERSITY  
LEGISLATIVE PROCESS  
AUTHORIZATION/NOTIFICATION SIGN-OFF SHEET

Approved: Department Chairperson  
Date 3/19/19 Signature, Department Chairperson [Signature]

Approved: College Curriculum Committee  
Date 5/2/19 Signature, College Curriculum Committee Chair [Signature]

Approved: Dean of College  
Date 5/2/19 Signature, Dean [Signature]

Approved: General Education Committee (if applicable)  
Date \_\_\_\_\_ Signature, General Education Committee Chair \_\_\_\_\_

Approved: Council for Teacher Education (if applicable)  
Date 9/4/19 Signature, Council for Teacher Education Chair [Signature]

Approved: Faculty Senate University Undergraduate Curriculum Committee  
Date 10/14/19 Signature, Undergraduate Curriculum Committee Chair [Signature]

Approved: Faculty Senate  
Date \_\_\_\_\_ Signature, Recording Secretary, Faculty Senate \_\_\_\_\_

Final approved packet forwarded to Provost's office.  
Date \_\_\_\_\_ Signature, Recording Secretary, Faculty Senate \_\_\_\_\_

Approval at Kansas Board of Regents level:

COCAO Date: \_\_\_\_\_

The Provost's Office will notify the department, college and Registrar of the completion of the approval process.

Originating Department(s): After completing this form, in its entirety, please upload it to the Zimbra Briefcase, "Undergraduate Curriculum Legislation" (within the appropriate College folder, "Preliminary Legislation"), to allow for review and questions. Any modifications should be saved as "original file name.version2.docx" and uploaded as well. Following final College Curriculum Committee approval, please print the final version of this form, apply the appropriate signatures, and forward to the Office of the Registrar.

Following Faculty Senate Approval, SUBMIT SIGN-OFF SHEET AND FINAL COMPLETE PACKAGE, in electronic format, TO THE OFFICE OF THE PROVOST (220 RUSS HALL) FOR FORWARDING TO THE KANSAS BOARD OF REGENTS FOR BOARD APPROVAL.

Please Note: This is at least a 2-3 month process from the time of first submission and is designed to eliminate concerns and questions at the beginning of the process. Any questions/concerns not addressed prior to the review by the College Curriculum Committee and the Faculty Senate University Undergraduate Curriculum Committee may result in an additional month added to the process, before it is sent to the Kansas Board of Regents for approval, which may result in a delay in implementation.

