



Pittsburg State University

Faculty Senate Meeting

Date: Monday, October 31st, 2022
Time: 3:00 p.m.
Location: Sunflower Room, Overman Student Center

Agenda

- I. Call to order**
- II. Approval of September 26, 2022 minutes**
- III. Announcements**
 - A. Provost and Vice President of Academic Affairs- Dr. Howard Smith**
 - B. PSU/KNEA Remarks- Khamis Siam**
 - C. Student Senate Remarks- Tarryn Brenner**
 - D. Unclassified Professional Senate Remarks- Tammy Higgins**
 - E. University Support Staff Remarks- Diane Letner**
 - F. Faculty Senate Report- Karen Johnson**
- IV. Committee Reports**
 - A. Academic Affairs Committee - Chair: Mike Carper**
 - Undergraduate Curriculum Subcommittee - **Chair: Janet Zepernick**
 - Library Services/Learning Resources Subcommittee - **Chair: Chase Dearing**
 - Online and Distance Learning Committee - **Chair: Laurent Pretot**
 - Academic Honors Subcommittee - **Chair: Kris Lawson**
 - Honors College Subcommittee - **Chair: Rion Huffman**

- **Writing Across the Curriculum Subcommittee - Chair: Jason Clemensen**
- **Diversity and Multicultural Affairs Subcommittee - Chair: Laura Washburn**

B. Student-Faculty Committee - Chair: Cole Shewmake

C. All-University Committee - Chair: John Daley

D. Faculty Affairs Committee - Chair: Amy Hite

E. Constitution Committee - Chair: Casie Hermansson

F. Pitt State Pathway Committee - Chair: Bob Kehle

G. Budget Committee - Chair: Kent Runyan

H. Academic Honesty Committee - Chair: Rebeca Book

V. Unfinished Business:

VI. New Business:

VII. Open Forum:

VIII. Adjournment

Next Faculty Senate Meeting: November 28th, 2022 in the Sunflower Room, OSC

Academic Affairs – Chair: Mike Carper

No report

Undergraduate Curriculum – Chair: Janet Zepernick (Rebeca Book reporting)

Library Services – Chair: Chase Dearing

No report

Online and Distance Learning – Chair: Laurent Pretot

The online and distance learning committee met on Thursday, 10/20/22 and discussed updating the distance education plan as a major goal for this year. We reviewed the current online programs landing page, our current distance education plan, and discussed how to align the distance education plan with HLC accreditation standards.

Academic Honors – Chair: Kris Lawson

The Academic Honors committee met with the Registrar on October 10 to discuss the process of inviting and approving AH applications and challenges the Registrar's Office faces within that process. A particular challenge that students and the Registrar's Office face is the deadline for Academic Honors applications.

The deadline is currently spelled out in the "Policies and Regulations" section of the catalog under the subheading "Academic Honors." The current policy reads:

Students must formally elect to take a course for honors by completing the Enrollment For Academic Honors form and have applications returned to the Registrar's Office, Room 103 Russ Hall, by the Monday of the 3rd full week of classes.

The Academic Honors committee suggests this policy be reworded to read (revisions are highlighted):

Students must formally elect to take a course for honors during the Spring or Fall semesters by completing the Enrollment For Academic Honors form and having applications returned to the Registrar's Office, Room 103 Russ Hall, by the fifteenth class day of that semester; students applying to take a course for honors during the Summer semester must complete and submit the application to the Registrar's Office by the first class day of the 13th week of the Spring semester.

The changes will

1. clear up confusion caused by Monday holidays early in each semester, and
2. allow for an orderly application process for students who want to complete an Academic Honors project during the summer. Setting the summer due date as the first class day of the 13th week of Spring will account for any Monday holidays, allow for enrollment in the class in question (as enrollment typically happens in week 11), and allow the appropriate Academic Honors committees to meet and discuss the applications while committee members are still on contract.

The committee requests a first reading at the October Faculty Senate Meeting with an anticipated vote on the new policy at the November meeting.

Honors College – Chair: Rion Huffman

The chair of Honors College Committee along with the Faculty Senate President and Parliamentarian met with the Provost, Dr. Smith on October 5th to discuss the possibility of naming a faculty member to assist Heather Eckstein in carrying out the duties of the Interim Director position. The plans to make this appointment were confirmed by the Provost. This position has not been filled yet, with more information to follow. The committee met on Monday, October 24th to create a timeline of action items to work on the reimagining of the Honors College.

Writing Across the Curriculum – Chair: Jason Clemensen

The Writing Across the Curriculum Committee met on Wednesday October 12th at 8:30am. The committee discussed the plans to review the Fall 2022 Writing to Learn best practices submissions. The committee reviewed how to access the documents within Canvas. There are 41 submissions. Each committee member has been assigned 6 submissions to score against the rubric provided. Submissions are to be scored no later than October 27th.

Diversity and Multicultural Affairs – Chair: Laura Washburn

Diversity and Multicultural committee shares information as they can on campus events. If you have events, surveys, or curriculum around diversity, equity, inclusion, or multicultural programs, please send to any member of the committee or to the chair Laura Washburn.

Student-Faculty – Chair: Cole Shewmake

A question was raised regarding the start date of dead week. Upon follow-up with the Registrar, dead week is defined as "Monday - Friday".

All-University – Chair: John Daley No report

Faculty Affairs – Chair: Amy Hite

Faculty Affairs: Khamis Siam will serve as Recorder. Sabbatical requests have been reviewed, ranked, and forwarded to the Provost. Continue to review travel requests, balance \$83,589.07.

Meeting Oct 31 to review travel requests/expenses and current request form. Will provide update at November meeting.

Constitution – Chair: Casie Hermansson

No report

Pitt State Pathway – Chair: Bob Kehle

The Pitt Pathway Committee has passed the following English courses for inclusion in the Pathway courses:

117
118
121
122

123
124
124
125

We still have 1 course pending. The survey had only 10 respondents.

Budget Committee – Chair: Kent Runyan

No Report

Academic Honesty – Chair: Rebeca Book

No Report

UGCC Meeting 09/16/2022					
Voting Members Approval of Proposed Changes					Ex-Officio
	Goedeke	Hutchens	Pross	Zepernick	Book
					Not present
Dept: Tech & Workforce Learning					
Request for Revision to Curriculum					
Change name of "Associate of Applied Science with a Major in AMMT" to "Associate of Applied Science with a major in Wood Product Manufacturing"	x	x	x	x	
Change name of "Bachelor of Applied Science with a Major in AMMT" to "Bachelor of Applied Science with a major in Wood Product Manufacturing"	x	x	x	x	
Change name of "Bachelor of Science with a Major in AMMT" to "Bachelor of Science with a major in Wood Product Manufacturing"	x	x	x	x	
Request for Revision to Course					
AMMT-182 prefix and name change to WPM - 182	X	X	X	X	
AMMT-185 to WPM - 185	X	X	X	X	
AMMT-226 to WPM -226	X	X	X	X	
AMMT 282 to WPM - 282	X	X	X	X	
AMMT 286 to WPM - 286	X	X	X	X	
AMMT 300 to WPM 300	X	X	X	X	
AMMT 301 to WPM 301	X	X	X	X	
AMMT 326 to WPM 326	X	X	X	X	
AMMT 333 to WPM 333	X	X	X	X	
AMMT 383 to WPM 383	X	X	X	X	
AMMT 399 to WPM 399	X	X	X	X	
AMMT 400 to WPM 400	X	X	X	X	
AMMT 412 to WPM 412	X	X	X	X	
AMMT 426 to WPM 426	X	X	X	X	
AMMT 454 to WPM 454	X	X	X	X	
AMMT 511 to WPM 511	X	X	X	X	
AMMT 523 to WPM 523	X	X	X	X	
AMMT 525 to WPM 525	X	X	X	X	
AMMT 585 to WPM 585	X	X	X	X	
AMMT 602 to WPM 602	X	X	X	X	
AMMT 691 to WPM 691	X	X	X	X	
AMMT 692 to WPM 692	X	X	X	X	
AMMT 699 to WPM 699	X	X	X	X	
WT 795 to WPM 795	X	X	X	X	

Request for Deletion of Curriculum					
	Deletion of Wood Product Manufacturing emphasis	X	X	X	X
	Deletion of Wood Teacher Training emphasis	X	X	X	X
Dept: BIO					
Request for Revision to Curriculum					
	Add courses to Criminal Justice Major*	X	X	X	X
Request Revision to Course					
	BIOL-303 - lowering prerequisite requirement to make course more accessible for non-bio majors	X	X	X	X
	BIOL 535 - adding BIO 330 as a prereq.	X	X	X	X
	BIOL 576 - change the prerequisites from BIOL 111, 211/212 to BIOL 330 to make it easier for SSRM students who choose to enrol	X	X	X	X
Request for new course					
	BIOL 400 - Introduction to Undergraduate Research	x	x	x	x
Dept: EML					
Request for Revision to Curriculum					
	ENGL 113 General Literature to ENGL 113 Literature and Culture	x	x	x	x
Request for new course					
	ENGL 117 Introduction to Fiction - recommend removing the phrase "by men and women"	x	x	x	x
	ENGL 118 Introduction to Poetry - recommend removing the phrase "by men and women"	x	x	x	x
	ENGL 121 Intro to Anti-Racist Literature	x	x	x	x
	ENGL 122 Intro to Women's Literature	x	x	x	x
	ENGL 123 The Citizen in Literature	x	x	x	x
	ENGL 124 Health and Literature	x	x	x	x
	ENGL 125 Introduction to Horror in Literature	x	x	x	x
Dept: History, Philosophy, and Social Sciences					
Request for Revision to Curriculum					
	Multicultural Studies Minor description and allowed courses	x	x	x	x
Request Revision to Course					
	Name and description change: HIST 660 Industrial America to HIST 660 American Gilded Age	x	x	x	x
Dept: Engineering Technology					
Request for Revision to Curriculum					

Substitute MECET 121 for MFGET 160 in Manufacturing Management minor	x	x	x	x	
Request Revision to Course					
Description change of: MECET 121 to reflect the recommended sequences within the program	x	x	x	x	
Name and description change of: MECET 226 "Computer Aided Design" to MECET 226"Engineering Graphics II"	x	x	x	x	
Name and description change of: MECET 323 "Advanced Engineering Graphics" to MECET 323 "Industrial Graphics"	x	x	x	x	
Name and description change of: MECET 528 "Computer Aided Modeling" to MECET 528 "Engineering Graphics III"	x	x	x	x	
Dept: Interdisciplinary Studies (Women's Studies)					
Request for Revision to Curriculum					
Offer more classes for those seeking a minor in Women's and Gender Studies	x	x	x	x	
Offer more classes for those seeking a minor in Women's Health	x	x	x	x	
* Approved subject to correction of hours required in Major curriculum summary.					
"Required Core" should state (21-22) rather than (22-23) in both current and proposed major sections.					

UGCC Meeting 10/7/2022

	Voting Members Approval of Proposed Changes				Ex-Officio Book
	Goedeke	Hutchens	Pross	Zepernick	
Dept: Communication					
Request for Revision to Course					
COMM 544 to accept COMM 436 as an additional prerequisite	X	X	X	X	
Dept: History, Philosophy, and Social Sciences					
Request for Revision to Course					
HIST 430 name change to : Historical Methods	X	X	X	X	
Dept: Physics					
Request for new course					
PHYS 302 - Scientific Programming with Python	X	X	X	X	
Request for Revision to Curriculum					
Adding PHYS 302 to replace CIS 230, keeping 230 as optional sub, remove CIS 240 as sub	X	X	X	X	

*Approved subject to correction of hours required in Major curriculum summary.

"Required Core" should state (21-22) rather than (22-23) in both current and proposed major sections.

Request for Revision to Course

(Undergraduate Course Numbers through Course Number 699)

Department: CommunicationCollege: Arts and Sciences

Submission

Date: 03/28/22Contact Person: Megan Westhoff Faculty member ChairRevision Effective: Fall 2022 (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 revision only affects students majoring in Communication with a theatre or communication education emphasis, who are required to enroll in COMM 544 Stage Direction to meet the requirements of their degree.

Purpose/Justification for Revision to Course: Prior to the recent revision of our Department of Communication curriculum, students in the theatre emphasis were required to take COMM 363 Stagecraft. After the curriculum revision, students in the theatre emphasis have the option to take one of two technical theatre courses, either COMM 363 Stagecraft or COMM 463 Technical Production. This proposed revision to the course prerequisite will reflect the current curriculum.

Existing Course:

Course Number: COMM 544Title of Course: Stage DirectionCredit Hours: 3Prerequisite: COMM 254 Acting Studies and COMM 363 Stagecraft or permission of instructor

Course Description (**as it appears in the current catalog**): The fundamentals of stage direction. Emphasis on script analysis, proper blocking, preparation of the script for the actors, technicians and managers. Provides experience in directing a one-act play. Prerequisites: COMM 254 Acting Studies and COMM 363 Stagecraft or permission of instructor.

Proposed Course:

Course Number: COMM 544Title of Course: Stage DirectionCredit Hours: 3

Prerequisite: COMM 254 Acting Studies and either COMM 363 Stagecraft or COMM 463 Technical Production or permission of instructor

Course Description (**as it will appear in the next catalog**): The fundamentals of stage direction. Emphasis on script analysis, proper blocking, preparation of the script for the actors, technicians and managers. Provides experience in directing a one-act play. Prerequisites: COMM 254 Acting Studies and either COMM 363 Stagecraft or COMM 463 Technical Production, or permission of instructor.

Additional Questions

1. Is this course to be considered for PittState Pathway? Yes No

If "yes," please complete the Pitt State Pathway Course Approval Form found on the Faculty Senate webpage.

Please realize that this requirement will need to gain approval of the Pitt State Pathway Committee after the revisions have been approved by Faculty Senate.

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

If "yes," please realize that this requirement 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 _____ Signature, Department Chairperson Celia Patterson
- Approved: College Curriculum Committee
 Date 5/2/22 Signature, College Curriculum Committee Chair Mary Carol Pomatto
- Approved: Dean of College
 Date 5/2/22 Signature, Dean Mary Carol Pomatto
- Approved: Council for Teacher Education (if applicable)
 Date _____ Signature, Council for Teacher Education Chair _____
- Approved: Faculty Senate University Undergraduate Curriculum Committee
 Date 10/10/22 Signature, Undergraduate Curriculum Committee Chair Janet Zepernick
- Approved: Faculty Senate
 Date _____ Signature, President, Faculty Senate _____
- Approved: Pitt State Pathway Committee (if applicable)
 Date _____ Signature, Pitt State Pathway Committee Chair _____
- Approved: Faculty Senate
 Date _____ Signature, President, 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 SharePoint, "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: History, Philosophy, and Social Sciences College: Arts & Sciences
Submission Date: March 2022

Contact Person: Kris Lawson Faculty member Chair

Revision Effective: Fall 2022 (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.

Update of course title does not affect any other PSU program.

Purpose/Justification for Revision to Course: Revising title to reflect longstanding trends in the Historical profession.

Existing Course:

Course Number: HIST 430

Title of Course: History: Theory and Practice

Credit Hours: 3

Prerequisite: 9 hours of history and sophomore standing or permission of instructor

Course Description (as it appears in the current catalog): Introduction to basic historical research methods and writing, library usage, and bibliographical aids.

Proposed Course:

Course Number: HIST 430

Title of Course: Historical Methods

Credit Hours: 3

Prerequisite: 9 hours of history and sophomore standing or permission of instructor

Course Description (as it will appear in the next catalog): Introduction to basic historical research methods and writing, library usage, and bibliographical aids.

Additional Questions

1. Is this course to be considered for PittState Pathway? Yes No

If "yes," please complete the Pitt State Pathway Course Approval Form found on the Faculty Senate webpage.

Please realize that this requirement will need to gain approval of the Pitt State Pathway Committee after the revisions have been approved by Faculty Senate.

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

If "yes," please realize that this requirement 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 3/28/22 Signature, Department Chairperson *James D. [Signature]*
- Approved: College Curriculum Committee
Date 5/2/22 Signature, College Curriculum Committee Chair *Mary Carol Pomatto*
- Approved: Dean of College
Date 5/2/22 Signature, Dean *Mary Carol Pomatto*
- Approved: Council for Teacher Education (if applicable)
Date _____ Signature, Council for Teacher Education Chair _____
- Approved: Faculty Senate University Undergraduate Curriculum Committee
Date 10/10/22 Signature, Undergraduate Curriculum Committee Chair *Janet Zepernick*
- Approved: Faculty Senate
Date _____ Signature, President, Faculty Senate _____
- Approved: Pitt State Pathway Committee (if applicable)
Date _____ Signature, Pitt State Pathway Committee Chair _____
- Approved: Faculty Senate
Date _____ Signature, President, 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 SharePoint, "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 New Course

(Undergraduate Course Numbers through Course Number 699)

Department: Physics College: Arts & SciencesSubmission Date: 06/14Contact Person: David W. Pearson Faculty member Chair

Is this new course proposal 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.*This course is intended to be an alternative to the CIS 230 - Introduction to Programming for students pursuing a physics degree. The course will be designed to better prepare the students for PHYS 502 - Computational Physics by introducing programming to the students using the same programming language, Python, as well as introducing some commonly used programming libraries, or to be a better option for science students who may only take a single programming course.**Proposed Course:**Course Number: PHYS 302Title of Course: Scientific Programming with PythonCredit Hours: 3Date first offered: SP 2023

(Semester/Year)

 Fall Spring Summer
(check all that apply)Prerequisite: MATH 019 Intermediate Algebra or MATH 110 College Algebra with Review or MATH 113 College Algebra or MATH 150 Calculus ICourse Description (as it will appear in the next catalog): An introduction to the basic elements and concepts of object-oriented programming using the Python programming language. Python programming libraries that are useful for scientific programming are explored in order to make graphs, fit functions to data, and perform some elementary data analysis.Purpose/Justification for Proposed Course: Students majoring in physics are required to take CIS 230 - Introduction to Programming. This course uses either Visual Basic or C++ as the language to introduce the programming concepts. When first learning programming, it is difficult for students to separate the concepts from the language. Python is the defacto standard language in many areas, Physics included, and can be far more beneficial to our students in their future courses, especially PHYS 502 - Computational Physics, and their future careers. Additionally, this course will provide a 300 level physics course to help our students meet their degree requirements.**Objectives/Student Learning Outcomes (as it will appear in the syllabus)**See attached syllabus. These are listed on the bottom of page 1.**Assessment Strategies [e.g., exams, projects, university rubric, etc. (as it will appear in the syllabus)]**See attached syllabus. These are detailed on page 2.

If you wish to attach a syllabus, you may attach it to the end of this document as part of the packet.

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:

3. Is this course to be considered for Pitt State Pathway? Yes No

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

Please realize that this requirement will need to gain approval of the Pitt State Pathway Committee after it has been approved by Faculty Senate as a new course.

4. Will this course be required of any education majors? Yes No
If "yes," please realize that this requirement will need to have the approval of the Council for Teacher Education.

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

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

- Approved: Department Chairperson
 Date 6/14/22 Signature, Department Chairperson *[Signature]*
- Approved: College Curriculum Committee
 Date 9/2/22 Signature, College Curriculum Committee Chair *Mary Carol Pomatto*
- Approved: Dean of College
 Date 9/2/22 Signature, Dean *Mary Carol Pomatto*
- Approved: Council for Teacher Education (if applicable)
 Date _____ Signature, Council for Teacher Education Chair _____
- Approved: Faculty Senate University Undergraduate Curriculum Committee
 Date 10/10/22 Signature, Undergraduate Curriculum Committee Chair *Janet Zepernick*
- Approved: Faculty Senate
 Date _____ Signature, Recording Secretary, Faculty Senate _____
- Approved: PittState Pathway Committee (if applicable)
 Date _____ Signature, Pitt State Pathway Committee Chair _____

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 SharePoint, "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.

PHYS302 | Scientific Programming with Python

Syllabus – Spring 2023

Instructor Info

 Dr. David W. Pearson

 dwpearson@pittstate.edu

 302 Yates Hall

 To be determined (TBD)

Or by apt.

Course Info

 TBD

 TBD

 TBD

 *Introduction to Scientific Programming with Python*, David W. Pearson, ISBN: Course Pack

Grading

Breakdown

Programming Projects	50%
Concept Quizzes	30%
Final	20%

Scale

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	< 60%

Overview

This course will introduce you to the basic elements and concepts of object-oriented programming using the Python programming language. Later in the course, Python libraries that are useful for scientific programming are explored in order to make graphs, fit functions to data, and perform some elementary data analysis.

Objectives & Student Learning Outcomes

After completing this course, you should be able to:

- Write basic computer programs in Python.
- Write Python code that follows the PEP8 style guide.
- Apply problem solving strategies to create a computer program.
- Understand core programming concepts such as libraries, variables, arrays, loops, control logic, functions, and classes.
- Use Python in the interactive, command line mode for quick number crunching.
- Fit functions to, and make graphs of data in Python.
- Perform basic data analysis in Python, such as finding means, standard deviations, and creating histograms.
- Know where to find online resources to help you further your programming ability.

Programming Projects

The primary mode of assessment in this course will be the completion of programming projects. These projects will require you to use your knowledge of the programming concepts being taught to create a simple computer program. Along with the program source code, you will also prepare a brief written description of how you approached the problem and the programming concepts you applied to achieve the solution. Projects will be graded on the following criteria.

- The program, as submitted, functions as intended and solves the problem. This means the program executes completely, produces the desired output, and doesn't issue any warnings or errors.
- The program, as submitted, uses the appropriate programming concepts to efficiently solve the problem. There are often a multitude of ways to solve the same problem with programming. For example you could copy and paste a line of code one hundred times to solve an iterative calculation, however, a program loop will accomplish the same task in two lines of code, and would be easily extensible to larger numbers of iterations.
- The program, as submitted, follows the PEP8 style guide for Python programs. These guidelines are meant to ensure program readability, and will save you time in the future should you need to revisit an old program.
- The written description clearly conveys an understanding of the problem to be solved by the program. You cannot hope to solve a problem that you do not comprehend.
- The written description clearly conveys an understanding of the programming concepts used in the solution to the problem.
- The written description clearly conveys the approach to solving the problem such that another person familiar with programming would be able to write their own program to solve the problem in the same way, without consulting the source code.

Concept Quizzes

There will be frequent, short quizzes, i.e. approximately weekly, 10 – 15 minutes quizzes. These quizzes will take place in class and will be completed in an “unplugged” manner, meaning the traditional pen and paper method. Each quiz will test your knowledge of a particular programming element or concept that we have recently reviewed in class.

Final Exam

The final exam in this course will consist of two parts. The first part will be similar to the concept quizzes, but longer and comprehensive. You will be given questions to test your knowledge of all the concepts that we have explored throughout the semester. The second part of the final will be a programming challenge. You will be asked to solve an elementary problem, similar to one you solved in a programming project. In this part you must write the program, and get it to function as intended. During the programming challenge, you will be permitted to consult online documentation for Python libraries as needed, but not websites like Stack Overflow.

Request for Revision to Curriculum

Revision for: Major Minor Emphasis Certificate

Department: Physics College: Arts & Sciences

Submission Date: 06/14/2022

Revision Effective: Fall, 2023
(Year)

Contact Person: David W. Pearson

Faculty member Chair

Name of Existing Major or Minor/Emphasis/Certificate: Physics

If proposing a name change to major or minor/emphasis/certificate, indicate Proposed Name Change:

Description of Change: Add a proposed new course, PHYS-302 Scientific Programming with Python, to replace an required course, CIS-230 Introduction to Programming, while keeping CIS-230 as an allowed substitution. Remove CIS-240 Intermediate Programming as a substitution as it now requires CIS-230 as a prerequisite.

Rationale for Change (include changes to curriculum objectives): The new course, PHYS-302, will be tailored to better fit the needs of physics students, and better prepare them for PHYS-502 Computational Physics. Additionally, this will build in a 300 level physics course for majors, helping them to fulfill their degree requirements. Keeping CIS-230 as an allowed substitution allows students to continue to progress towards their degree in the event that they cannot make PHYS-302 work with their schedules.

Is this revision 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.

This is a minor change designed to better serve physics majors at Pittsburg State.

Is this revision 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.

This is purely a change to better serve physics majors.

Existing Major or Minor/Emphasis/Certificate

Copy and paste the existing curriculum **as it currently appears** in the online catalog:

Core Requirements (39 hours)

Physics

__ PHYS-500 Mathematical Physics (3 hours)

__ PHYS-510 Analytical Mechanics I (3 hours)

__ PHYS-512 Electricity and Magnetism I (3 hours)

__ PHYS-516 Modern Physics I (3 hours)

__ PHYS-530 Intermediate Physics Laboratory (____) (3 hours)

__ PHYS-699 Senior Review and Assessment (1 hour)

Other

- CHEM-215 General Chemistry I (3 hours)
- and CHEM-216 General Chemistry I Laboratory (2 hours)
- CHEM-225 General Chemistry II (3 hours)
- and CHEM-226 General Chemistry II Laboratory (2 hours)
- MATH-150 Calculus I (5 hours)
- MATH-155 Calculus II (5 hours)
- CIS-230 Introduction to Programming (3 hours)
- or CIS-240 Intermediate Programming (3 hours)

Proposed Major or Minor/Emphasis/Certificate:

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

Core Requirements (39 hours)

Physics

- PHYS-302 Scientific Programming with Python (3 hours)
- or CIS-230 Introduction to Programming (3 hours)
- PHYS-500 Mathematical Physics (3 hours)
- PHYS-510 Analytical Mechanics I (3 hours)
- PHYS-512 Electricity and Magnetism I (3 hours)
- PHYS-516 Modern Physics I (3 hours)
- PHYS-530 Intermediate Physics Laboratory (____) (3 hours)
- PHYS-699 Senior Review and Assessment (1 hour)

Other

- CHEM-215 General Chemistry I (3 hours)
- and CHEM-216 General Chemistry I Laboratory (2 hours)
- CHEM-225 General Chemistry II (3 hours)
- and CHEM-226 General Chemistry II Laboratory (2 hours)
- MATH-150 Calculus I (5 hours)
- MATH-155 Calculus II (5 hours)

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:





3. Will this revision have specific PittState Pathway courses required? Yes No
Please realize that this requirement will need to gain approval of the PittState Pathway Committee.
4. Will this revision affect any education majors? Yes No
If "yes," please realize that this requirement will need to have the approval of the Council for Teacher Education.
5. What additional costs will be required for this modification (e.g. staffing, equipment, etc.)?
None

Additional Questions for certificate only:

1. Are students pursuing only this certificate eligible for federal financial assistance based on federal guidelines? (minimum of 24 hours) Yes No
2. 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 6/14/22 Signature, Department Chairperson 
- Approved: College Curriculum Committee
Date 9/6/22 Signature, College Curriculum Committee Chair 
- Approved: Dean of College
Date 9/6/22 Signature, Dean 
- Approved: PittState Pathway Committee (if applicable)
Date _____ Signature, PittState Pathway Committee Chair _____
- Approved: Council for Teacher Education (if applicable)
Date _____ Signature, Council for Teacher Education Chair _____
- Approved: Faculty Senate University Undergraduate Curriculum Committee
Date 10/10/22 Signature, Undergraduate Curriculum Committee Chair 
- 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 (if required): Date: _____

Each college curriculum representative will notify their respective college and department(s) of the completion of the approval process. If COCAO/KBOR approval is required, questions should be directed to the Provost's administrative officer at x4113.

Originating Department(s): After completing this form, in its entirety, please upload it to the SharePoint, "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 (if required) SIGN-OFF SHEET AND FINAL COMPLETE PACKAGE, in electronic format, TO THE OFFICE OF THE PROVOST (220 RUSS HALL). Please check with the Provost's administrative officer at x4113 if unsure.

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 (if required) to the Kansas Board of Regents, which may result in a delay in implementation.