CFC Meeting Agenda Monday, January 24, 2022, 4 p.m., Zoom

Seid Adem	Ashley Maxwell	Theodore Shonka
Allan Ayella	Rebecca Meador	Bradley Siebert
Carolyn Carlson	Michael McGuire	Josh Smith
Amber	Justin Moss	Cherry Steffen
Dickenson	Matt Nyquist	Courtney
Karen Garrison	Michael O'Brien	Sullivan
Kristen Grimmer	Vince Rossi	Nan Sun
Lindsey Ibañez	Azyz Sharafy	Kai Xu
Bruce Mactavish	Janet Sharp	

- I. Call to Order
- II. *Approval of CFC Minutes, Monday, November 15, 2021
- III. *Accept Division Reports
 - A. NSD: Nov. 19, 2021
 - B. SSD: Online Nov. 12-19, 2021
- IV. Committee Reports
 - A. Curriculum Committee
 - 1. Courses reviewed: CM 111, CM 203, EG 103, EG 303, EN 400, PS 103, PS 303
- V. Old Business
- VI. New Business
 - A. Draft of Revised CAS Tenure and Promotion criteria
- VII. Discussion
 - A. Faculty Service
- VIII. Information Items
- IX. Concerns
- X. Announcements
- XI. Adjourn

CFC Meeting Agenda Monday, November 15, 2021, 4 p.m., BTAC Forum Room & Zoom

Ashley Maxwell Theodore Shonka Present: Rebecca Meador Bradley Siebert Seid Adem Michael McGuire Josh Smith Allan Ayella Justin Moss Cherry Steffen Carolyn Carlson Matt Nyquist Courtney Amber Michael O'Brien Sullivan Dickinson Azyz Sharafy Nan Sun Kristen Grimmer Kai Xu Janet Sharp

I. Call to Order -- 4:02pm

Lindsey Ibañez Bruce Mactavish

- II. *Approval of CFC Minutes, Monday, October 18, 2021--Approved
- III. *Accept Division Reports
 - A. Humanities Division:
 - 1. April 12-2, 20211 online -- Accepted
 - 2. April 20, 2021 Zoom -- Accepted
 - 3. October 5-15, 2021 online -- Accepted
 - B. NSD: October 15, 2021 -- Accepted
 - C. SSD: October 15, 2021 -- Accepted

IV. Committee Reports -- None

- ** A brief update was given that 34 proposals were submitted to be evaluated by the Professional Development Sub-Committee for the CAS Summer Professional Development Fellowship.
- **A brief update was given that the Resources Sub-Committee will be meeting on Friday to evaluate capital requests.
- V. *Old Business
 - A. Student Perception Survey
 - **Proposals for the new student perception surveys have been sent out.
 - **There was more support for questions included in this meeting packet.
 - **Questions were revised after discussion with Deans and Department Chairs.
- VI. New Business -- None
- VII. Discussion -- None
- VIII. Information Items -- None
- IX. Concerns -- None

- X. *Announcements
 **The Thanksgiving play is going on for one more weekend.
 **Next CFC meeting is scheduled for December 6th.

XI. Adjourn -- 4:12pm

Natural Science Division (NSD) Minutes for Friday, November 19, 2021.

- I. Meeting called to order at 2:00 pm by Division Chair Seid Adem.
- II. Minutes of the previous NSD meetings (10/15/21) were approved as circulated.
- III. Committee Reports none.
- V. Old Business –

The current CAS Promotion and Tenure Guidelines proposal was discussed.

- VI. New Business The division unanimously approved the following course changes, new courses, and program changes.
 - A. Computer Information Science
 - 1) CM 111 Intro to Structured Prog. Minor Change
 - 2) CM 203 Digital Forensics Minor Change
 - 3) Bachelor of Science in Computer Information Science with a Concentration in Data Science Program Change
 - B. Physics and Astronomy
 - 1) EG 116 Engineering Graphics Minor Change
 - 2) EG 103- New Course
 - 3) EG 303 -New Course
 - 4) PS 103-New Course
 - 5) PS 303 -New Course

VII. Discussion –

A. CAS Administrative Assistant situation was discussed. There was concern expressed about faculty input into this proposal and suggested that is may be something to be discussed at a CFC meeting. The lack of transparency and speed of this proposal was a concern. A major purpose of this proposal is to allow an improved pay scale for the new administrative specialist position.

VIII. Announcements –

The meeting was adjourned at 2:54pm.

Minutes respectfully submitted by Rick Barker, Secretary

There was an interesting and informative interesting presentation by Dr. Josh Smith, about "Too Much or Not Enough: Determining appropriate subsampling procedures in forensic entomology."



	_
Select Request Type	
* O New Course	
Course Change	
O Delete a Course	
Course Change Form	
Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit this approval request until the spring semester when the new Courseleaf software has been implemented.)	
Please provide the requested course change information in the areas below	
What is the subject code?* EG	
What is the course number?* 116	
Please indicate what about the course is to be changed?	
Course title	
Course number	
Course description (minor change)	
Course description (significant change)	
Credit hours Choose V	
Credit prerequisites Yes	
Change from graded to credit/no credit Choose	
Other	
What is the rationale for the change? *We would like to eliminate the prerequisites for EG 116 Engineering Graphics to position the course to be taught for both Washburn and Topeka Center for Advanced Learning & Careers (TCALC) students. TCALC students are USD 501 high school students who are in the engineering pathways program but will not have had the opportunity to take EG 105 Introduction to Engineering, and the content covered in EG 105 is not needed for EG 116.	
What, if any, additional equipment or facilities will be needed to teach this class?	
None	
Is this course repeatable? No	
Effective date: * 1/1/2022	
Inititator First Name Inititator Last Name Inititator Email Karen Camarda karen.camarda@washburn.edu	
3935373536	
Karen Camarda 10/08/2021	
Initiator Signature Date	
To be completed by the library:	
Email address of librarian completing evaluation: alan.bearman@washburn.edu	
Are current library holdings adequate?* Yes	
3538313531	
Q_{1}, Q_{2}, \ldots	
Library Signature 10/13/2021 Date	
To be completed by Chair of the Department of Education:	
Will addition of/changes to this course in any way alter the program leading to a teacher certification?* No	

Route to Affected Dept/School Route to Division Chair Route to Dean Route to Dean Route to CFCCC Division Chair Approver First Name Seid adem Dean Approver First Name Stephenson Dean Approver First Name Stephenson Dean Approver Email Stephenson Dean Approver Email Iaura Stephenson CAS Comments (optional) If you have questions about this form, please contact Kelly Erby. Erby will get pdfs of the materials for division chair to share with their constituents. Division Chair Approval Division Chair Comments (optional) Signature 11/19/2021 Date	Cherry Steffen Dept of Edication Signature	10/19/2021 Date	
Division Chair Approver First Name Division Chair Approver Last Name Seid adem Seid			
seid adem adem	Route to Affected Dept/School	Route to Division Chair 🔽	Route to Dean 🗹 Route to CFCCC 🗆
Dean Approver First Name Dean Approver Last Name Dean Approver Last Name Dean Approver Email			
* stephenson * laura.stephenson@washburn.edu CAS Comments (optional) If you have questions about this form, please contact Kelly Erby. Erby will get pdfs of the materials for division chair to share with their constituents. Division Chair Approval Division Chair Comments (optional) 3933323133 **Jeid Addem** 11/19/2021 Date Dean Approval Dean Comments (optional) 3732369731 **Jaura Stephenson@washburn.edu **	seid adem	adem	seid.adem@washburn.edu
CAS Comments (optional) If you have questions about this form, please contact Kelly Erby. Erby will get pdfs of the materials for division chair to share with their constituents. Division Chair Approval Division Chair Comments (optional)			
If you have questions about this form, please contact Kelly Erby. Erby will get pdfs of the materials for division chair to share with their constituents. Division Chair Approval Division Chair Comments (optional)	laura	* stephenson	aura.stephenson@washburn.edu
materials for division chair to share with their constituents. Division Chair Approval Division Chair Comments (optional) 3933323133 Seidadem 11/19/2021 Signature Date Dean Approval Dean Comments (optional) 3732363731 Saura Stephenson 11/19/2021 Signature Date	CAS Comments (optional)		
Division Chair Approval Division Chair Comments (optional) 3933323133 Leid Addem Signature Dean Approval Dean Approval Dean Comments (optional) 3732363731 Laura Stepkenson Signature 11/19/2021 Date	If you have questions about this form,	please contact Kelly Erby. Erby will get pdfs	of the
Division Chair Comments (optional) Signature Dean Approval Dean Comments (optional) Laura Stephenson Signature 11/19/2021 Date		ur men consuluents.	
Signature Dean Approval Dean Comments (optional) Signature 11/19/2021 Date 12/19/2021 Date 13/32363731 Laura Stephenson Signature 11/19/2021 Date			
Signature Dean Approval Dean Comments (optional) 3732363731 Signature 11/19/2021 Date	רוואויט ווטופועונ (optional)		
Signature Dean Approval Dean Comments (optional) 3732363731 Signature 11/19/2021 Date			
Signature Dean Approval Dean Comments (optional) 3732363731 Signature 11/19/2021 Date			Ť
Signature Date Dean Approval Dean Comments (optional) 3732363731 Laura Stephenson Signature Date		33323133	
Dean Approval Dean Comments (optional) 3732363731 Laura Stephenson Signature 11/19/2021 Date			
Dean Comments (optional) 3732363731 Laura Stephenson 11/19/2021 Signature Date	Signature	Date	
3732363731 Laura Stephenson 11/19/2021 Signature Date	Dean Approval		
Signature Date	Dean Comments (optional)		
Signature Date			
Signature Date			Y
		32363731	
	LauraStephenson	11/19/2021	
S Signature Electronically signed by Kelly Erby on 10/21/2021 2:13:08 PM	Signature	Date	
S Signature Electronically signed by Kelly Erby on 10/21/2021 2:13:08 PM			
3 Signature percentage signed by Reiny Endy On 10/2 1/2021 2:10:001 W	S Signature Electronically s	signed by Kelly Erby on 10/21/2021 2:13:08 PM	
	3 Signature Lieutonically 8	signed by Relly Liby Off 10/21/2021 2.10.001 W	

From: <u>Lindsey Ibanez</u>

To: <u>socsci</u>

Cc: <u>Michaela Saunders</u>
Subject: voting results

Date: Friday, November 19, 2021 12:29:38 PM

Attachments: assessment.png

secretary.pnq sabbatical.pnq hab.pnq

Dear Division colleagues,

Thank you for taking the time to elect representatives. Mary Sundal has been elected to the Honors Advisory Board, Sangyoub Park has been elected to the Academic/Sweet Sabbatical Committee, Michael McGuire has been elected to the Assessment Committee, and Alex Myers has been elected as division secretary. Congrats!

I hope you all have a wonderful Thanksgiving break.

Best, Lindsey

Lindsey M. Ibañez, Ph.D.
Assistant Professor of Sociology
Department of Sociology and Anthropology
Washburn University



Select Request Type * O New Course		
Course Change		
O Delete a Course		
Course Change Form		
Must this change be implemented before the semester when the new Courseleaf software		no then please wait to submit this approval request until the spring
Please provide the requested course change	information in the areas below	
What is the subject code?*		
What is the course number?* 111		
Please indicate what about the course is to be	e changed?	
Course title Intro to Structured Programm	-	
Course number CM111		
Course description (minor change) Prereqs	: MA112 (concurrent	
Course description (significant change)		
Credit hours No	_	
Credit prerequisites Yes	lacksquare	
Change from graded to credit/no credit No	\checkmark	
Other		
What is the rationale for the change?		1
	ninor in Digital Forensics. In order to do this they equire MA116 but CJ majors only need MA112.	
We have decided that MA112 (Concurrent O the course.	K) or Math ACT>=22 are sufficient prereqs for	
What, if any, additional equipment or facilitie	s will be needed to teach this class?	1
None]
Is this course repeatable? Yes	\overline{V}	
Effective date: * ASAP		
Inititator First Name	Inititator Last Name	Inititator Email
Bruce	Mechtly	bruce.mechtly@washburn.edu
3537313234	•	
Bruce Mechtly Initiator Signature	10/14/2021	
initiator Signature	Date	
To be completed by the library:		
Email address of librarian completing evalua	tion: alan.bearman@washburn.edu	
Are current library holdings adequate?* Yes		
373837303	2	
Alan Bearman		
Library Signature		
To be completed by Chair of the Department		Gotton 2 *
will addition or changes to this course in any	way alter the program leading to a teacher certif	ication?* No ✓
363432323	5	

oute to Affected Dept/School	Route to Division Chair <a> 	Route to Dean Route to CFC
ivision Chair Approver First Name seid	Division Chair Approver Last Name * adem	Division Chair Approver Email * seid.adem@washburn.edu
ept Approver First Name sarah	Dept Approver Last Name *cook	Dept Approver Email *sarah.cook@washburn.edu
ean Approver First Name	Dean Approver Last Name * stephenson	Dean Approver Email * laura.stephenson@washburn.edu
FCCC Approver First Name	CFCCC Approver Last Name	CFCCC Approver Email
bruce AS Comments (optional)	mactavish	* bruce.mactavish@washburn.edu
you have questions about using this fo nd CFCCC chairs pdfs of materials to s	rm, please contact Kelly Erby. Erby will get d share with their constituents.	ivision
epartment or School Approval		
optional)		^
		~
37323 Sarah Cook	43637 10/21/2021	
Signature	Date	
vision Chair Approval vision Chair Comments (optional)		
· · · · · ·		^
22202	40520	~
seid Adem	11/19/2021	→
33393 Seid Adem Signature ean Approval		
Signature	11/19/2021	
Signature ean Approval	11/19/2021	
Signature ean Approval ean Comments (optional)	11/19/2021 Date	
Seid Adem Signature ean Approval ean Comments (optional)	11/19/2021 Date	
Signature ean Approval ean Comments (optional)	73738 11/19/2021	
Signature ean Approval ean Comments (optional)35353 Laura Stephenson Signature	73738 11/19/2021	
Signature ean Approval ean Comments (optional) 35353 Laura Stephenson Signature -CCC Approval	73738 11/19/2021	
Signature ean Approval ean Comments (optional) 35353 Laura Stephenson Signature -CCC Approval	73738 11/19/2021 Date 73748 11/19/2021 Date	



* O New Course
© Course Change
O Delete a Course
Course Change Form
Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit this approval request until the spring semester when the new Courseleaf software has been implemented.)
Please provide the requested course change information in the areas below
What is the subject code?* CM
What is the course number?* 203
Please indicate what about the course is to be changed?
Course title Digital Forensics I
Course number CM203/CJ290
Course description (minor change) Prereqs: MA112 (concurrent
Course description (significant change)
Credit hours No
Credit prerequisites Yes
Change from graded to credit/no credit No
Other
What is the rationale for the change?
*CJ majors can take CM203/CJ290 as an elective for CJ, or for a digital forensics minor. CJ
majors are required to take MA112 but not MA116. The current prereqs for CM203/CJ290 require MA116. We have decided that MA112 is sufficient (as is Math ACT>=22).
What, if any, additional equipment or facilities will be needed to teach this class? None.
Is this course repeatable? Yes
Effective date: * ASAP
Inititator First Name Inititator Last Name Inititator Email
Bruce bruce.mechtly@washburn.edu
3535303438
Bruce Mechtly 10/14/2021
Initiator Signature Date
To be completed by the library:
Email address of librarian completing evaluation: alan.bearman@washburn.edu
Are current library holdings adequate?* Yes
3133353831
Alan Bearman 10/14/2021 Library Signature Date
Library Signature Date
To be completed by Chair of the Department of Education:
Will addition of/changes to this course in any way alter the program leading to a teacher certification?* No
3532373236

oute to Affected Dept/School 🔽	Route to Division Chair 🔽	Route to Dean 🗹 Route to CFC
ivision Chair Approver First Name	Division Chair Approver Last Name * adem	Division Chair Approver Email * seid.adem@washburn.edu
ept Approver First Name	Dept Approver Last Name *cook	Dept Approver Email * sarah.cook@washburn.edu
ean Approver First Name aura	Dean Approver Last Name * stephenson	Dean Approver Email * laura.stephenson@washburn.edu
FCCC Approver First Name	CFCCC Approver Last Name	CFCCC Approver Email
oruce AS Comments (optional)	mactavish	*bruce.mactavish@washburn.edu
you have questions about using this fo nd CFCCC chairs pdfs of materials to s	rm, please contact Kelly Erby. Erby will get d share with their constituents.	ivision
partment or School Approval		
pt Comments (optional)		^
		~
30393	83830	
Sarah Cook Signature	10/21/2021 Date	
vision Chair Approval vision Chair Comments (optional)		
		^
		\$
37333 Leid Adem	11/19/2021	\(\rightarrow\)
37333 Seid Adem Signature an Approval		
Seid Adem Signature	11/19/2021	\
Seid Adem Signature ran Approval	11/19/2021	
Seid Adem Signature an Approval an Comments (optional)	11/19/2021 Date	
Seid Adem Signature an Approval ean Comments (optional)	11/19/2021 Date	
Seid Adem Signature an Approval an Comments (optional) 30373 Laura Stephenson Signature CCCC Approval	11/19/2021 Date 43830 11/19/2021	
Seid Adem Signature an Approval an Comments (optional) 30373 Laura Stephenson Signature	11/19/2021 Date 43830 11/19/2021	
Seid Adem Signature an Approval an Comments (optional) 30373 Laura Stephenson Signature CCCC Approval	11/19/2021 Date 43830 11/19/2021	
Seid Adem Signature an Approval an Comments (optional) 30373 Laura Stephenson Signature CCCC Approval	11/19/2021 Date 43830 11/19/2021 Date	



Select Request Type

- New Course
- Course Change
- Delete a Course

New Course Form

Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit this approval request until the spring semester when the new Courseleaf software has been implemented.)

Please enter new course information.
Course Title * Physics and Engineering Se
Department * Physics and Astronomy
Division * NSD
Course Level * Lower-division
Prefix * EG
Course Number* 103
Effective Semester* Fall 2022
Course Catalog Description (include prerequisites)
*An overview of the fields and practice of physics and engineering. Students will participate in weekly readings and discussions, and complete at least one written piece and at least one presentation. Specific content will change each time the course is offered.
Prerequisites None
Restrictions * None
Course Offered * Every Other Semester
Primarily Attract* Departmental Majors
Specify type and amount of any additional fees or tuition of other than the norm.
None
Please state the rationale for offering this course:

The foundational goals of the proposed source of

The foundational goals of the proposed course are to serve as an introduction to the fields and culture of physics and engineering, and to encourage physics majors, including dual-degree engineering students, to begin seeing themselves as physicists and engineers. Studies have shown that identity is an important aspect of "sticking with" challenging majors such as physics and engineering, especially for underrepresented groups. This course, along with the upper-division version PS/EG 303 Physics and Engineering Seminar II, will be a required course for all bachelors degrees offered by the department. Incoming students will be advised to take PS/EG 103 during their first year, and PS/EG 303 later, preferably in their junior or senior year (sophomore or junior year for engineering transfer students). These courses will be cross-listed, to serve the important goal of connecting students across academic levels, thereby enhancing a sense of culture and community. Students will be encouraged to enroll as often as they like.

The specific topics covered by the course are motivated by recent work summarized in the "Phys21" report by the Joint Task Force on Undergraduate Physics Programs, from the American Physical Society and the American Association of Physics Teachers. This document indicates that physics students need more education on what career options are available, how to develop long-term plans for careers, how to apply for jobs, and how to interview. Students also have a need to learn and practice skills that they do not consistently encounter in physics courses, such as writing, giving presentations, working in groups, and leading groups.

While some of the topics listed above could be introduced in physics classes (especially group interactions, writing, presenting), topics such as career planning do not fit well in typical classes. This course and its upper-division version provide a formal way of incorporating these areas into the curriculum.

The course will also serve as a means of helping students see physics and engineering in a holistic way and as connected fields, rather than disconnected topics such as mechanics, electromagnetism, and quantum mechanics.

Is this course required for the major?* Yes
If yes, which major(s)? *B.S. Physics, B.S. Computat
B.S. Physics, B.S. Computat
Does this course replace an existing course?* No
How will the teaching of this course be staffed? * Department faculty, as part
What, if any, additional equipment or facilities will be needed to teach this class?
None

Paste a copy of the master syllabus in the text area below. Please make sure the syllabus addresses 1) The extent and nature of the reading required for this course; 2) the writing component of the proposed course both qualitatively and quantitatively; 3) how student learning will be assessed

PS 103/EG 103: Physics and Engineering Seminar I PS 303/EG 303: Physics and Engineering Seminar II Master Syllabus

Description:

The purpose of this course is to expose students to the broad fields of physics and engineering, who physicists and engineers are, and what they do, including discussion of the ethical practice of science and engineering. Students will develop skills in career planning and the process of applying for jobs and/or post-graduate education. Students will practice the important skills of reflective reading and presenting their perspectives in written and oral forms.

While directed at students majoring in Physics, Computational Physics, or Engineering Physics, students from any major are invited to enroll.

Students majoring in Physics or Computational Physics, including students in the dual-degree engineering program, are required to enroll in PS/EG 103 at least once, and PS/EG 303 at least once. PS/EG 103 should be taken during a student's first year at Washburn, or as early as possible. PS/EG 303 should be taken during their junior or senior year (sophomore or junior year for engineering transfer students). Students are encouraged to enroll as often as they wish throughout their time at Washburn, however only 2 credits total of PS/EG 103 or PS/EG 303 will apply to the B.A. in Physics or the Minor in Physics.

Outcomes:

Students successfully completing this course will

Be able to identify major areas of physics and engineering and potential careers associated with those areas

Be able to accurately describe the process and ethical practice of science and engineering

Create and share reflective writing and presentation pieces based on assigned media

Create and present a career planning document that includes potential career paths with mile-post goals and steps needed to meet those goals

Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.

Attendance and participation:

Students are expected to attend one 1-hour class meeting each week. In addition, students will complete short exercises outside of class time, which may include reading, viewing videos, authoring and responding to online discussion posts, completing writing assignments, and creating presentations.

Reading:

Each offering of the course will be centered around a popular-level science book or similar set of readings, which will vary each time the course is offered. Students will be expected to complete a certain amount of reading each week.

Writing:

Students will complete short writing assignments each week reflecting on that week's assigned reading or other media. Students will also complete a larger writing piece focused on career planning goals.

Oral presentations:

Students will present their reflections formally on the assigned weekly media in class at least twice during the term. Students will make one formal presentation based on their written career planning document.

Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.	
Assessment:	
Student achievement of course goals will be assessed by instructor evaluation of written and oral presentation products, using department approved rubrics for each type of assignment. Assessment will focus on student developmental growth and progress throughout the term.	
A rubric score of 0 (not evaluated), 1 (beginning), 2 (developing), 3 (on target) will be applied for each assignment.	
The overall course grade will be assigned using a weighted average of rubric scores:	
Weekly class participation 10%	
Weekly writing assignments 20%	
Short oral presentations on assigned material 20%	
Oral presentation of career planning document 20%	
Written career planning document 30%	
A letter grade will be assigned using weighted average rubric score ranges:	
2.5 <= A < 3.0	
2.0 <= B < 2.5	
1.5 <= C < 2.0	
0.5 <= D < 1.5	
F < 0.5	
Attachment (optional)	
In the spring we will be submitting program change proposals for the B.S. in Physics, B.S. in Computational Physics, B.A. in Physics, and Minor in Physics. Students in the B.A. and B.S. programs will be required to take the PS 103 or EG 103 at least once, and PS 303 or EG 303 at least once. In cases in which a student transfers to Washburn with more than 60 credit hours, only the upper-division version will be required. Students may repeat the courses as many times as they wish, but no more than 2 credits will count towards the B.A. or the minor. (The B.S. degrees require specific courses, rather than numbers of credits, so no specific limitation will be indicated for those degrees.)	
This course will be offered for one credit hour.	
Is this course being proposed as a general education course?* No	
Inititator First Name Karen Inititator Last Name Camarda 3537353538	Inititator Email karen.camarda@washburn.edu
Karen Camarda 11/15/2021 Initiator Signature Date	
To be completed by the library: Email address of librarian completing evaluation: alan.bearman@washburn.edu	
Are current library holdings adequate?* Yes	
3339373533	
Alan Bearman 11/17/2021 Library Signature Date	
To be completed by Chair of the Department of Education:	
Will addition of/changes to this course in any way alter the program leading to a teacher certifi	ication?* No
3631373232	

Check of Affected Depth School Route to Division Chair Route to Affected Depth School Route to Affected Depth School Route to Division Chair Approver First Name Dean Approver Last Name Route to CFCCC Approver First Name CFCCC Approver First Name CFCCC Approver First Name CFCCC Approver First Name CFCCC Approver Last Name Division Chair Comments (optional) Division Chair Approver Last Name Dean Approver Last Name D	Charry Stonlan	11/17/2021	
Division Chair Approver First Name Seid Bean Approver Last Name Bean Approver Last Name Bean Approver First Name Seid adem@washburn.edu	Dept of Education Signature		
*Seid *Adem *Seid adem@washburn.edu Dean Approver First Name Dean Approver Last Name Stephenson Stephe	Route to Affected Dept/School	Route to Division Chair 🔽	Route to Dean Route to CFCCC
Stephenson Ste			
Division Chair Approval Division Chair Comments (optional) Serial Language Date Dean Approval Dean Comments (optional) Dean Comments (optional) Signature Date Date CFCCC Comments (optional) Date CFCCC Comments (optional) Date			
Division Chair Approval Division Chair Comments (optional) 3991323735 Signature Date Dean Approval Dean Comments (optional) 3737383439 Signature Date CFCCC Approval CFCCC Comments (optional) 3834303133 Bruce Mactaviak 11/30/2021 Date			
Division Chair Comments (optional) Signature	CAS Comments (optional)		
Division Chair Comments (optional) Signature			^
Division Chair Comments (optional) Signature			~
Signature Dean Approval Dean Comments (optional) Signature 11/19/2021 Date Date Date 11/19/2021 Date CFCCC Approval CFCCC Comments (optional) CFCCC Comments (optional) CFCCC Sproval CFCCC Comments (optional) CFCCC Sproval CFCCC Comments (optional) Date 11/30/2021 Date			
Signature Dean Approval Dean Comments (optional)	Division Chair Comments (optional)		^
Signature Dean Approval Dean Comments (optional)			
Signature Dean Approval Dean Comments (optional)	20242	23735	
Dean Approval Dean Comments (optional)			
Dean Comments (optional) Laura Stephenson Signature CFCCC Approval CFCCC Comments (optional) 3834303133 Bruce Mactavish 11/30/2021 Signature Date			
Signature CFCCC Approval CFCCC Comments (optional) Signature 11/19/2021 Date CFCCC Approval CFCCC Comments (optional) Signature 11/30/2021 Date			
Signature CFCCC Approval CFCCC Comments (optional) 3834303133 Bruce Mactavish Signature Date	Dean Comments (optional)		
Signature CFCCC Approval CFCCC Comments (optional) 3834303133 Bruce Mactavish Signature Date			
Signature CFCCC Approval CFCCC Comments (optional) 3834303133 Bruce Mactavish Signature Date			
CFCCC Comments (optional) 3834303133 Bruce Mactavish Signature 11/30/2021 Date	face a Ita-Passas		
CFCCC Comments (optional) 3834303133 Bruce Mactavish Signature 11/30/2021 Date	Signature		
Bruce Mactavish Signature 11/30/2021 Date			
Bruce Mactavish 11/30/2021 Signature Date	CFCCC Comments (optional)		
Bruce Mactavish 11/30/2021 Signature Date			
Bruce Mactavish 11/30/2021 Signature Date			¥
	Signature		
AS Signature Electronically signed by Kelly Erby on 11/17/2021 4:19:32 PM	•		
AS Signature Electronically signed by Kelly Erby on 11/17/2021 4:19:32 PM	NO.01 1	H K II E I 444-1999	
	AS Signature Electronically sign	ned by Kelly Erby on 11/17/2021 4:19:32 PM	



Select Request Type

- New Course
- Course Change
- Delete a Course

New Course Form

Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit this approval request until the spring semester when the new Courseleaf software has been implemented.)

Course Title * Physics and Engineering Se
Department * Physics and Astronomy
Division* NSD
Course Level* Upper-division
Prefix* EG
Course Number* 303
Effective Semester* Fall 2022
Course Catalog Description (include prerequisites) *An overview of the fields and practice of physics and engineering. Students will participate in weekly readings and discussions, and complete at least one written piece and at least one presentation. Specific content will change each time the course is offered. Prerequisite: upper-division standing
Prerequisites Upper-division standing
Prerequisites Upper-division standing Restrictions * None
D. C.
Restrictions * None
Restrictions * None Course Offered * Every Other Semester
Restrictions * None Course Offered * Every Other Semester Primarily Attract * Departmental Majors
Restrictions * None Course Offered * Every Other Semester Primarily Attract * Departmental Majors Specify type and amount of any additional fees or tuition of other than the norm.

and culture of physics and engineering, and to encourage physics majors, including dual-degree engineering students, to begin seeing themselves as physicists and engineers. Studies have shown that identity is an important aspect of "sticking with" challenging majors such as physics and engineering, especially for underrepresented groups. This course, along with the upper-division version PS/EG 303 Physics and Engineering Seminar II, will be a required course for all bachelors degrees offered by the department. Incoming students will be advised to take PS/EG 103 during their first year, and PS/EG 303 later, preferably in their junior or senior year (sophomore or junior year for engineering transfer students). These courses will be cross-listed, to serve the important goal of connecting students across academic levels, thereby enhancing a sense of culture and community. Students will be encouraged to enroll as often as they like.

The specific topics covered by the course are motivated by recent work summarized in the "Phys21" report by the Joint Task Force on Undergraduate Physics Programs, from the American Physical Society and the American Association of Physics Teachers. This document indicates that physics students need more education on what career options are available, how to develop long-term plans for careers, how to apply for jobs, and how to interview. Students also have a need to learn and practice skills that they do not consistently encounter in physics courses, such as writing, giving presentations, working in groups, and leading groups.

While some of the topics listed above could be introduced in physics classes (especially group interactions, writing, presenting), topics such as career planning do not fit well in typical classes. This course and its upper-division version provide a formal way of incorporating these areas into the curriculum.

The course will also serve as a means of helping students see physics and engineering in a holistic way and as connected fields, rather than disconnected topics such as mechanics,

electromagnetism, and quantum mechanics.
Is this course required for the major?* Yes
If yes, which major(s)?
*B.S. Physics, B.S. Computat
Does this course replace an existing course?* No
How will the teaching of this course be staffed?* Department faculty, as part
What, if any, additional equipment or facilities will be needed to teach this class?
What, if any, additional equipment or facilities will be needed to teach this class?

Paste a copy of the master syllabus in the text area below. Please make sure the syllabus addresses 1) The extent and nature of the reading required for this course; 2) the writing component of the proposed course both qualitatively and quantitatively; 3) how student learning will be assessed.

PS 103/EG 103: Physics and Engineering Seminar I PS 303/EG 303: Physics and Engineering Seminar II Master Syllabus

Description:

The purpose of this course is to expose students to the broad fields of physics and engineering, who physicists and engineers are, and what they do, including discussion of the ethical practice of science and engineering. Students will develop skills in career planning and the process of applying for jobs and/or post-graduate education. Students will practice the important skills of reflective reading and presenting their perspectives in written and oral forms.

While directed at students majoring in Physics, Computational Physics, or Engineering Physics, students from any major are invited to enroll.

Students majoring in Physics or Computational Physics, including students in the dual-degree engineering program, are required to enroll in PS/EG 103 at least once, and PS/EG 303 at least once. PS/EG 103 should be taken during a student's first year at Washburn, or as early as possible. PS/EG 303 should be taken during their junior or senior year (sophomore or junior year for engineering transfer students). Students are encouraged to enroll as often as they wish throughout their time at Washburn, however only 2 credits total of PS/EG 103 or PS/EG 303 will apply to the B.A. in Physics or the Minor in Physics.

Outcomes:

Students successfully completing this course will

Be able to identify major areas of physics and engineering and potential careers associated with those areas

Be able to accurately describe the process and ethical practice of science and engineering

Create and share reflective writing and presentation pieces based on assigned media

Create and present a career planning document that includes potential career paths with mile-post goals and steps needed to meet those goals

Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.

Attendance and participation:

Students are expected to attend one 1-hour class meeting each week. In addition, students will complete short exercises outside of class time, which may include reading, viewing videos, authoring and responding to online discussion posts, completing writing assignments, and creating presentations.

Reading

Each offering of the course will be centered around a popular-level science book or similar set of readings, which will vary each time the course is offered. Students will be expected to complete a certain amount of reading each week.

Writing:

Students will complete short writing assignments each week reflecting on that week's assigned reading or other media. Students will also complete a larger writing piece focused on career planning goals.

Oral presentations:

Students will present their reflections formally on the assigned weekly media in class at least twice during the term. Students will make one formal presentation based on their

,	
written career planning document.	
Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.	
Assessment:	
Student achievement of course goals will be assessed by instructor evaluation of written and oral presentation products, using department approved rubrics for each type of assignment. Assessment will focus on student developmental growth and progress throughout the term.	
A rubric score of 0 (not evaluated), 1 (beginning), 2 (developing), 3 (on target) will be applied for each assignment.	
The overall course grade will be assigned using a weighted average of rubric scores:	
Weekly class participation 10%	
Weekly writing assignments 20%	
Short oral presentations on assigned material 20%	
Oral presentation of career planning document 20%	
Written career planning document 30%	
A letter grade will be assigned using weighted average rubric score ranges:	
2.5 <= A < 3.0	
2.0 <= B < 2.5	
1.5 <= C < 2.0	
0.5 <= D < 1.5	
F < 0.5	
Attachment (optional)	
Additional Comments	
In the spring we will be submitting program change proposals for the B.S. in Physics, B.S. in Computational Physics, B.A. in Physics, and Minor in Physics. Students in the B.A. and B.S. programs will be required to take the PS 103 or EG 103 at least once, and PS 303 or EG 303 at least once. In cases in which a student transfers to Washburn with more than 60 credit hours, only the upper-division version will be required. Students may repeat the courses as many times as they wish, but no more than 2 credits will count towards the B.A. or the minor. (The B.S. degrees require specific courses, rather than numbers of credits, so no specific limitation will be indicated for those degrees.)	
This course will be offered for one credit hour.	
Is this course being proposed as a general education course?* No	
Inititator First Name Inititator Last Name	Inititator Email
Karen	karen.camarda@washburn.edu
3539323233	
Karen Camarda 11/15/2021	
Initiator Signature This 2021 Date	
To be completed by the library: Email address of librarian completing evaluation: alan.bearman@washburn.edu	
Are current library holdings adequate?* Yes	
3136313332	
Alan Bearman11/17/2021Library SignatureDate	
To be completed by Chair of the Department of Education:	
Will addition of/changes to this course in any way alter the program leading to a teacher certific	cation?* No
3332383038	,
000200000	

Cherry Storlon	11/15/2021	
Cherry Steffen Dept of Education Signature	Date	
Route to Affected Dept/School	Route to Division Chair 🔽	Route to Dean 🗷 Route to CFCCC 🗹
Division Chair Approver First Name * Seid	Division Chair Approver Last Name *Adem	Division Chair Approver Email *seid.adem@washburn.edu
Dean Approver First Name *Laura	Dean Approver Last Name *Stephenson	Dean Approver Email * laura.stephenson@washburn.edu
CFCCC Approver First Name *Bruce	CFCCC Approver Last Name * Mactavish	CFCCC Approver Email * bruce.mactavish@washburn.edu
CAS Comments (optional)		
		^
		~
Division Chair Approval		
Division Chair Comments (optional)		^
333033	2624	
Seid Adem	11/19/2021	
Signature		
Dean Approval		
Dean Comments (optional)		
		Y
303139 303139		
Laura Stephenson Signature	11/19/2021 Date	
CFCCC Approval		
CFCCC Comments (optional)		
		<u> </u>
353531	3935	
Bruce Mactavish Signature	11/30/2021 Date	
Olgitature	Daic	
CAS Signature Electronically sign	ed by Kelly Erby on 11/17/2021 3:40:33 PM	



Select Request Type	
* O New Course	
Course Change	
© Delete a Course	
Course Change Form	
Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit semester when the new Courseleaf software has been implemented.)	this approval request until the spring
Please provide the requested course change information in the areas below	
What is the subject code?*	
What is the course number? * 400	
Please indicate what about the course is to be changed?	
Course title X	
Course number	
Course description (minor change)	
Course description (significant change)	
Credit hours No	
Credit prerequisites No	
Change from graded to credit/no credit	
Other	
What is the rationale for the change?	
In spring 2021 the EN faculty voted to approve a proposed change of the capstone seminar for the literature emphasis to a model based on a senior thesis that students in this	
emphasis draft and develop under the guidance and supervision of a faculty member in that	
emphasis. This new model is similar to an independent study and is expected to help individual students master the research and writing process for their senior project better	
than a seminar environment would. We are basing this change on the model used by other CAS departments for a senior thesis.	
Proposed changes of the title and description:	
Current description:	
EN 400 Senior Seminar (3)	
This capstone course serves as the culminating experience for the literature emphasis of the English major. Students work together as a class with a faculty member on a specific	
topic of ongoing research in the faculty member's area of expertise. Prerequisites: English	
literature major, senior status, and consent.	
Proposed changes:	
EN 400 Senior Thesis (3)	
Capstone experience for the EN degree in the literature and film criticism emphasis.	
Working independently under the supervision of an assigned faculty member, students conduct research culminating in the writing of a substantial paper and a presentation of	
their research in a departmental or public forum. Prerequisite: Senior standing in the	
literature and film criticism emphasis and chair approval.	
What, if any, additional equipment or facilities will be needed to teach this class? None.	
Is this course repeatable? No	
Effective date: * January 2022	

nititator First Name	Inititator Last Name	Inititator Email
Vanessa	Steinroetter	vanessa.steinroetter@washburn.edu
373038	53030	
Vanessasteinroette		
Initiator Signature	Date	
To be completed by the library:		
Email address of librarian completing eva	aluation: alan.bearman@washburn.edu	
Are current library holdings adequate?*	Yes 🗸	
, ,	7	
32393	383138	
Alan Bearman Library Signature	10/19/2021	
Library Signature	Date	
To be completed by Chair of the Departm		
Will addition of/changes to this course in	any way alter the program leading to a teach	her certification?* No
34323	2/2121	
Cherry Stedden Dept of Education Sighature	10/19/2021	
Debt of Education Signature	Date	
Route to Affected Dept/School	Route to Division Chair	Route to Dean Route to CFCCC
·		
Division Chair Approver First Name Michael O'Brien	Division Chair Approver Last Name * O'Brien	Division Chair Approver Email * michael.obrien@washburn.edu
Michael O Brieff	OBITET	michael.obnen@washbum.edu
CFCCC Approver First Name	CFCCC Approver Last Name	CFCCC Approver Email
bruce	* mactavish	* bruce.mactavish@washburn.edu
CAS Comments (optional)		
		^
		~
Pivisian Chair Annuaval		
Division Chair Approval		
Division Chair Comments (optional)		
		^
		<u> </u>
353538	83532	
Michael OBrien Signature	11/09/2021 Date	
Gignature	Date	
CFCCC Approval		
FCCC Comments (optional)		
		^
		∨
i		
313036	63439	
Bruce Mactavish	11/30/2021	
Signature	Date	
S Signature Electronically sign	ned by Kelly Erby on 10/27/2021 9:45:27 AM	
, organically sign		



Select Request Type

- New Course
- Course Change
- Delete a Course

New Course Form

Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit this approval request until the spring semester when the new Courseleaf software has been implemented.)

Please enter new course information.
Course Title * Physics and Engineering Se
Department * Physics and Astronomy
Division* NSD
Course Level* Lower-division
Prefix* PS
Course Number * 103
Effective Semester* Fall 2022
Course Catalog Description (include prerequisites)
*An overview of the fields and practice of physics and engineering. Students will participate in weekly readings and discussions, and complete at least one written piece and at least one presentation. Specific content will change each time the course is offered.
Prerequisites None
Restrictions * None
Course Offered * Every Other Semester
Primarily Attract * Departmental Majors
Specify type and amount of any additional fees or tuition of other than the norm.
None
Please state the rationale for offering this course:

The foundational goals of the proposed course are to serve as an introduction to the fields and culture of physics and engineering, and to encourage physics majors, including dual-degree engineering students, to begin seeing themselves as physicists and engineers. Studies have shown that identity is an important aspect of "sticking with" challenging majors such as physics and engineering, especially for underrepresented groups. This course, along with the upper-division version PS/EG 303 Physics and Engineering Seminar II, will be a required course for all bachelors degrees offered by the department. Incoming students will be advised to take PS/EG 103 during their first year, and PS/EG 303 later, preferably in their junior or senior year (sophomore or junior year for engineering transfer students). These courses will be cross-listed, to serve the important goal of connecting students across academic levels, thereby enhancing a sense of culture and community. Students will be encouraged to enroll as often as they like.

The specific topics covered by the course are motivated by recent work summarized in the "Phys21" report by the Joint Task Force on Undergraduate Physics Programs, from the American Physical Society and the American Association of Physics Teachers. This document indicates that physics students need more education on what career options are available, how to develop long-term plans for careers, how to apply for jobs, and how to interview. Students also have a need to learn and practice skills that they do not consistently encounter in physics courses, such as writing, giving presentations, working in groups, and leading groups.

While some of the topics listed above could be introduced in physics classes (especially group interactions, writing, presenting), topics such as career planning do not fit well in typical classes. This course and its upper-division version provide a formal way of incorporating these areas into the curriculum.

The course will also serve as a means of helping students see physics and engineering in a holistic way and as connected fields, rather than disconnected topics such as mechanics, electromagnetism, and quantum mechanics.

Is this course required for the major?* Yes
If yes, which major(s)? *B.S. Physics, B.S. Computat
B.S. Physics, B.S. Computat
Does this course replace an existing course?* No
How will the teaching of this course be staffed? * Department faculty, as part
What, if any, additional equipment or facilities will be needed to teach this class?
None

Paste a copy of the master syllabus in the text area below. Please make sure the syllabus addresses 1) The extent and nature of the reading required for this course; 2) the writing component of the proposed course both qualitatively and quantitatively; 3) how student learning will be assessed

PS 103/EG 103: Physics and Engineering Seminar I PS 303/EG 303: Physics and Engineering Seminar II Master Syllabus

Description:

The purpose of this course is to expose students to the broad fields of physics and engineering, who physicists and engineers are, and what they do, including discussion of the ethical practice of science and engineering. Students will develop skills in career planning and the process of applying for jobs and/or post-graduate education. Students will practice the important skills of reflective reading and presenting their perspectives in written and oral forms.

While directed at students majoring in Physics, Computational Physics, or Engineering Physics, students from any major are invited to enroll.

Students majoring in Physics or Computational Physics, including students in the dual-degree engineering program, are required to enroll in PS/EG 103 at least once, and PS/EG 303 at least once. PS/EG 103 should be taken during a student's first year at Washburn, or as early as possible. PS/EG 303 should be taken during their junior or senior year (sophomore or junior year for engineering transfer students). Students are encouraged to enroll as often as they wish throughout their time at Washburn, however only 2 credits total of PS/EG 103 or PS/EG 303 will apply to the B.A. in Physics or the Minor in Physics.

Outcomes:

Students successfully completing this course will

Be able to identify major areas of physics and engineering and potential careers associated with those areas

Be able to accurately describe the process and ethical practice of science and engineering

Create and share reflective writing and presentation pieces based on assigned media

Create and present a career planning document that includes potential career paths with mile-post goals and steps needed to meet those goals

Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.

Attendance and participation:

Students are expected to attend one 1-hour class meeting each week. In addition, students will complete short exercises outside of class time, which may include reading, viewing videos, authoring and responding to online discussion posts, completing writing assignments, and creating presentations.

Reading:

Each offering of the course will be centered around a popular-level science book or similar set of readings, which will vary each time the course is offered. Students will be expected to complete a certain amount of reading each week.

Writing:

Students will complete short writing assignments each week reflecting on that week's assigned reading or other media. Students will also complete a larger writing piece focused on career planning goals.

Oral presentations:

Students will present their reflections formally on the assigned weekly media in class at least twice during the term. Students will make one formal presentation based on their written career planning document.

Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.	
Assessment:	
Student achievement of course goals will be assessed by instructor evaluation of written and oral presentation products, using department approved rubrics for each type of assignment. Assessment will focus on student developmental growth and progress throughout the term.	
A rubric score of 0 (not evaluated), 1 (beginning), 2 (developing), 3 (on target) will be applied for each assignment.	
The overall course grade will be assigned using a weighted average of rubric scores:	
Weekly class participation 10%	
Weekly writing assignments 20%	
Short oral presentations on assigned material 20%	
Oral presentation of career planning document 20%	
Written career planning document 30%	
A letter grade will be assigned using weighted average rubric score ranges:	
2.5 <= A < 3.0	
2.0 <= B < 2.5	
1.5 <= C < 2.0	
0.5 <= D < 1.5	
F < 0.5	
Attachment (optional)	
In the spring we will be submitting program change proposals for the B.S. in Physics, B.S. in Computational Physics, B.A. in Physics, and Minor in Physics. Students in the B.A. and B.S. programs will be required to take the PS 103 or EG 103 at least once, and PS 303 or EG 303 at least once. In cases in which a student transfers to Washburn with more than 60 credit hours, only the upper-division version will be required. Students may repeat the courses as many times as they wish, but no more than 2 credits will count towards the B.A. or the minor. (The B.S. degrees require specific courses, rather than numbers of credits, so no specific limitation will be indicated for those degrees.)	
This course will be offered for one credit hour.	
Is this course being proposed as a general education course?* No	
Inititator First Name Karen Inititator Last Name Camarda 3637313832 Karen Camarda 11/15/2021	Inititator Email karen.camarda@washburn.edu
Initiator Signature Date	
To be completed by the library: Email address of librarian completing evaluation: alan.bearman@washburn.edu Are current library holdings adequate?* Yes	
3933323733 Olan Bearman	
To be completed by Chair of the Department of Education:	
Will addition of/changes to this course in any way alter the program leading to a teacher certification.	ication?* No
3236383333	

Cherry Steffen Dept of Education Signature	11/15/2021 Date	
Route to Affected Dept/School	Route to Division Chair	Route to Dean Route to CFCCC
Division Chair Approver First Name	Division Chair Approver Last Name	Division Chair Approver Email * seid.adem@washburn.edu
Dean Approver First Name	Dean Approver Last Name * stephenson	Dean Approver Email * laura.stephenson@washburn.edu
CFCCC Approver First Name * bruce	CFCCC Approver Last Name * mactavish	CFCCC Approver Email * bruce.mactavish@washburn.edu
CAS Comments (optional)		
		^
		▽
Division Chair Approval Division Chair Comments (optional)		
Division Chair Comments (optionar)		^
		∨
39343	43931	
Seid adem	11/19/2021	
Signature	Date	
Dean Approval Dean Comments (optional)		
(spassar)		^
		∨
37383	43634	
Laura Stephenson Signature	11/19/2021	
	Date	
CFCCC Approval CFCCC Comments (optional)		
		^
		~
31393	83736	
Bruce Mactavish Signature	11/30/2021	
Signature	Date	
CAS Signature Electronically sign	ned by Kelly Erby on 11/17/2021 4:17:45 PM	



Select Request Type

- New Course
- Course Change
- Delete a Course

New Course Form

Must this change be implemented before the start of spring semester 2022? (If the answer is no then please wait to submit this approval request until the spring semester when the new Courseleaf software has been implemented.)

Please enter new course information.
Course Title * Physics and Engineering Se
Department * Physics and Astronomy
Division * NSD
Course Level * Upper-division
Prefix* PS
Course Number* 303
Effective Semester* Fall 2022
Course Catalog Description (include prerequisites)
*An overview of the fields and practice of physics and engineering. Students will participate in weekly readings and discussions, and complete at least one written piece and at least one presentation. Specific content will change each time the course is offered. Prerequisite: upper-division standing
Prerequisites Upper-division standing
Restrictions* None
Course Offered * Every Other Semester
Course Offered * Every Other Semester Primarily Attract * Departmental Majors
Livery Other Ocinicater
Primarily Attract* Departmental Majors
Primarily Attract* Departmental Majors Specify type and amount of any additional fees or tuition of other than the norm.

The foundational goals of the proposed course are to serve as an introduction to the fields and culture of physics and engineering, and to encourage physics majors, including dual-degree engineering students, to begin seeing themselves as physicists and engineers. Studies have shown that identity is an important aspect of "sticking with" challenging majors such as physics and engineering, especially for underrepresented groups. This course, along with the upper-division version PS/EG 303 Physics and Engineering Seminar II, will be a required course for all bachelors degrees offered by the department. Incoming students will be advised to take PS/EG 103 during their first year, and PS/EG 303 later, preferably in their junior or senior year (sophomore or junior year for engineering transfer students). These courses will be cross-listed, to serve the important goal of connecting students across academic levels, thereby enhancing a sense of culture and community. Students will be encouraged to enroll as often as they like.

The specific topics covered by the course are motivated by recent work summarized in the "Phys21" report by the Joint Task Force on Undergraduate Physics Programs, from the American Physical Society and the American Association of Physics Teachers. This document indicates that physics students need more education on what career options are available, how to develop long-term plans for careers, how to apply for jobs, and how to interview. Students also have a need to learn and practice skills that they do not consistently encounter in physics courses, such as writing, giving presentations, working in groups, and leading groups.

While some of the topics listed above could be introduced in physics classes (especially group interactions, writing, presenting), topics such as career planning do not fit well in typical classes. This course and its upper-division version provide a formal way of incorporating these areas into the curriculum.

The course will also serve as a means of helping students see physics and engineering in a holistic way and as connected fields, rather than disconnected topics such as mechanics,

electromagnetism, and quantum mechanics.
Is this course required for the major?* Yes
If yes, which major(s)?
*B.S. Physics, B.S. Computat
Does this course replace an existing course?* No
How will the teaching of this course be staffed?* Department faculty, as part
What, if any, additional equipment or facilities will be needed to teach this class?
What, if any, additional equipment or facilities will be needed to teach this class?

Paste a copy of the master syllabus in the text area below. Please make sure the syllabus addresses 1) The extent and nature of the reading required for this course; 2) the writing component of the proposed course both qualitatively and quantitatively; 3) how student learning will be assessed.

PS 103/EG 103: Physics and Engineering Seminar I PS 303/EG 303: Physics and Engineering Seminar II Master Syllabus

Description:

The purpose of this course is to expose students to the broad fields of physics and engineering, who physicists and engineers are, and what they do, including discussion of the ethical practice of science and engineering. Students will develop skills in career planning and the process of applying for jobs and/or post-graduate education. Students will practice the important skills of reflective reading and presenting their perspectives in written and oral forms.

While directed at students majoring in Physics, Computational Physics, or Engineering Physics, students from any major are invited to enroll.

Students majoring in Physics or Computational Physics, including students in the dual-degree engineering program, are required to enroll in PS/EG 103 at least once, and PS/EG 303 at least once. PS/EG 103 should be taken during a student's first year at Washburn, or as early as possible. PS/EG 303 should be taken during their junior or senior year (sophomore or junior year for engineering transfer students). Students are encouraged to enroll as often as they wish throughout their time at Washburn, however only 2 credits total of PS/EG 103 or PS/EG 303 will apply to the B.A. in Physics or the Minor in Physics.

Outcomes:

Students successfully completing this course will

Be able to identify major areas of physics and engineering and potential careers associated with those areas

Be able to accurately describe the process and ethical practice of science and engineering

Create and share reflective writing and presentation pieces based on assigned media

Create and present a career planning document that includes potential career paths with mile-post goals and steps needed to meet those goals

Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.

Attendance and participation:

Students are expected to attend one 1-hour class meeting each week. In addition, students will complete short exercises outside of class time, which may include reading, viewing videos, authoring and responding to online discussion posts, completing writing assignments, and creating presentations.

Reading

Each offering of the course will be centered around a popular-level science book or similar set of readings, which will vary each time the course is offered. Students will be expected to complete a certain amount of reading each week.

Writing:

Students will complete short writing assignments each week reflecting on that week's assigned reading or other media. Students will also complete a larger writing piece focused on career planning goals.

Oral presentations:

Students will present their reflections formally on the assigned weekly media in class at least twice during the term. Students will make one formal presentation based on their

·	
written career planning document.	
Students enrolled in PS303/EG303 will complete an additional presentation over a topic to be decided on in consultation with the instructor.	
Assessment:	
Student achievement of course goals will be assessed by instructor evaluation of written and oral presentation products, using department approved rubrics for each type of assignment. Assessment will focus on student developmental growth and progress throughout the term.	
A rubric score of 0 (not evaluated), 1 (beginning), 2 (developing), 3 (on target) will be applied for each assignment.	
The overall course grade will be assigned using a weighted average of rubric scores:	
Weekly class participation 10%	
Weekly writing assignments 20%	
Short oral presentations on assigned material 20%	
Oral presentation of career planning document 20%	
Written career planning document 30%	
A letter grade will be assigned using weighted average rubric score ranges:	
2.5 <= A < 3.0	
2.0 <= B < 2.5	
1.5 <= C < 2.0	
0.5 <= D < 1.5	
F < 0.5	
Attachment (optional)	
Additional Comments	
In the spring we will be submitting program change proposals for the B.S. in Physics, B.S. in Computational Physics, B.A. in Physics, and Minor in Physics. Students in the B.A. and B.S. programs will be required to take the PS 103 or EG 103 at least once, and PS 303 or EG 303 at least once. In cases in which a student transfers to Washburn with more than 60 credit hours, only the upper-division version will be required. Students may repeat the courses as many times as they wish, but no more than 2 credits will count towards the B.A. or the minor. (The B.S. degrees require specific courses, rather than numbers of credits, so no specific limitation will be indicated for those degrees.)	
This course will be offered for one credit hour.	
Is this course being proposed as a general education course?* No	
Inititator First Name Inititator Last Name	Inititator Email
Karen	karen.camarda@washburn.edu
3932373331	
Karen Camarda 11/15/2021	
Initiator Signature Date	
To be completed by the library:	
Email address of librarian completing evaluation: alan.bearman@washburn.edu	
Are current library holdings adequate? * Yes	
3534363434	
Alan Bearman 11/17/2021 Library Signature Date	
To be completed by Chair of the Department of Education:	
Will addition of/changes to this course in any way alter the program leading to a teacher certific	cation?* No
3435313534	

Cherry Stedlen	11/15/2021	
Cherry Steffen Dept of Education Signature	Date	
Route to Affected Dept/School	Route to Division Chair	Route to Dean Route to CFCCC
Division Chair Approver First Name * Seid	Division Chair Approver Last Name	Division Chair Approver Email *seid.adem@washburn.edu
Dean Approver First Name * Laura	Dean Approver Last Name *Stephenson	Dean Approver Email * laura.stephenson@washburn.edu
CFCCC Approver First Name *Bruce	CFCCC Approver Last Name *Mactavish	CFCCC Approver Email * bruce.mactavish@washburn.edu
CAS Comments (optional)		
		^
		~
Division Chair Approval Division Chair Comments (optional)		
Division Chair Comments (optionar)		^
		~
373932	3039	
Seid adem	11/19/2021	
Signature	Date	
Dean Approval Dean Comments (optional)		
Dour Commonte (optional)		^
		~
353933	13839	
Laura Stephenson Signature	11/19/2021 Date	
CFCCC Approval		
CFCCC Comments (optional)		
303533	10704	
Bruce Mactavish Signature	11/30/2021	
Signature	Date	
CAS Signature Electronically sign	ed by Kelly Erby on 11/17/2021 3:42:27 PM	

A. The College of Arts and Sciences

1. General Policy

The College of Arts and Sciences of Washburn University wishes to maintain the highest possible standards of teaching, scholarship and service; to ensure every faculty member full academic freedom; to render every qualified faculty member secure in their profession; and to enable the College of Arts and Sciences to rely on the continuous employment of a competent faculty. It is, therefore, the policy of the College of Arts and Sciences to provide stability and continuity of employment for the faculty in an atmosphere of academic integrity and mutual confidence.

The basic responsibilities of the College of Arts and Sciences are to preserve, augment, criticize, and transmit knowledge and to encourage creativity. Thus, the College of Arts and Sciences should appoint, develop and retain distinguished faculty members with outstanding qualification. Tenure and promotion within the College of Arts and Sciences are consistent with general University policy in emphasizing the importance of teaching, scholarship, and service by its faculty.

Appointment or promotion to the rank of Associate Professor normally requires a record of success in teaching, scholarship, and service. Appointment or promotion to the rank of Professor normally requires excellence in teaching, scholarship, and service.

Promotion and tenure in the College of Arts and Sciences at Washburn University are never automatic. They must be earned.

2. Minimum Requirements for Consideration for Promotion and Tenure

a. Education

Granting of tenure and appointment to the rank of Assistant Professor or higher normally requires completion of professional education in most fields marked by the Ph.D. or other recognized terminal degree.

b. Experience

Beginning with appointment to the rank of full-time assistant professor or a higher rank, the probationary period at Washburn University shall not exceed six years. At least three of these six years must be at Washburn as a full-time assistant professor or higher rank. Up to three years credit may be granted for full-time *teaching* at *Washburn* or other institutions of higher education.

For promotion to Associate Professor, the candidate must have completed six years of full-time college-level academic experience, the last three of which must have been at the Assistant Professor rank. If the candidate is eligible for promotion during the year of the tenure decision, then one petition and one departmental committee may be used for both. Where a department employs different standards for tenure and for promotion, the relevant set of standards must be met for each. A candidate for Associate Professor whose petition for tenure is denied may not be promoted.

For promotion to Professor, the candidate must have completed ten years of full-time college-level academic experience, four of which must have been at the Associate Professor rank.

c. Teaching

Effective teachers are essential to the College of Arts and Sciences. The quality of instruction must be judged by its intrinsic purposes: to transmit and preserve knowledge, to encourage critical and creative thought, to foster a lively interest in learning, and to stimulate a continuing commitment to inquiry.

Evidence of teaching effectiveness could include but is not limited to

- student learning
- informed judgment of colleagues
- record of pedagogical training
- record of teaching innovation, either in pedagogy or content
- student perceptions and opinions
- a process of continuous improvement
- mentoring of independent student research projects (e.g., WTEs, Apeiron)
- student advising

d. Research and Scholarship

Scholarly activity is the obligation of all tenure-track members of the faculty of the College of Arts and Sciences. A faculty member's scholarship must be judged by their contributions to knowledge through peer-reviewed publications or peer-reviewed creative activities in their discipline.

Evidence of scholarly activities could include but is not limited to

- publication of books
- publication of articles and reviews of a scholarly nature
- the presentation of professional papers
- the conducting of professional workshops
- the receipt of grants, awards and fellowships for scholarly work
- achievement in peer-reviewed art related to a faculty member's work, such as musical performance compositions, arrangements, recordings, or juried or invitational art exhibits

e. Service

Service to the department, to the College of Arts and Sciences, to the University, to the profession, and/or to the community is the responsibility of each faculty member. For this purpose, community service must draw upon professional expertise.

Evidence of service activities could include but is not limited to

- active participation in the department and on committees
- administrative leadership
- sponsorship of student organizations
- serving as a representative of the University where professionally appropriate
- work with community partner(s)

- activities promoting and advancing diversity and inclusion
- membership on professional boards or organizations
- reviews of manuscripts for journals, publishers, grant funding, or conferences
- invited lectures to campus or community groups

3. Procedures for Recommendation for Promotion

- a. In the fall of the initial year of eligibility, the Dean of the College of Arts and Sciences will forward to the chairperson of each department the names of all tenured and non-tenured members of its faculty below the rank of Professor who will have met the minimum educational and experiential requirements for promotion in academic rank by the end of that academic year.
- b. The department chairperson will inform the candidates, invite them to submit the appropriate form and to supply whatever other materials they desire to substantiate their qualifications, and oversee the election of a departmental committee of at least five (5) tenured members of higher academic rank than the candidate. The department chairperson will not be a member of this committee, nor will any other candidate for promotion, nor will members of the College Committee on Promotion and Tenure. The department chairperson will not serve on the College Committee for Promotion and Tenure during the time in which the department has a candidate for promotion.
- c. If the department lacks the necessary five members, the candidate will submit to the Dean of the College of Arts and Sciences a list of higher-ranking members of other college departments. The list shall be at least twice that number lacking in the candidate's department. The Dean, in consultation with the College Promotion and Tenure Committee, then will select the final members of the committee.
- d. The candidate may choose which of the committee members he or she wants to chair the committee.
- e. All department members are encouraged to submit recommendations on promotion to the department promotion committee. These recommendations become part of the candidate's file and are submitted with the file to the Dean.
- f. If there is a negative decision by the department committee, its chairperson will promptly inform the candidate, and the file will be forwarded to the Dean only at the candidate's request.
- g. If the department committee determines that a recommendation for promotion is in order, that recommendation together with supporting materials will be forwarded to the Dean of the College of Arts and Sciences through the department chairperson.
- h. The department chairperson will submit their recommendation to the Dean.
- i. The Dean will distribute the materials to the College Committee on Promotion and Tenure for its consideration. The College Committee on Promotion and Tenure will provide copies of its recommendations to the candidate at the time it submits the recommendations to the Dean of the College. Upon receipt of the College Promotion and Tenure recommendations, the Dean will also submit to the Vice President for Academic Affairs their recommendations together with the recommendations of the College Promotion and Tenure Committee, the department chairperson, and the departmental committee.

- 4. Procedures for Recommendation for Tenure
- a. In the fall of each year, the Vice President for Academic Affairs of the University distributes to the dean of each major academic unit a list of faculty members whose tenure status must be reviewed before the end of the current academic year. In academic units with departments, the deans then will inform the appropriate department chairs.
- b. The department chairperson will inform the candidates, invite them to submit the appropriate form and to supply whatever other materials they desire to substantiate their qualifications, and oversee the election of a departmental committee of at least five (5) tenured members of the department. The department chairperson will not be a member of this committee, nor will members of the College Committee on Promotion and Tenure. The department chairperson will not serve on the College Committee on Promotion and Tenure during the time in which the department has a candidate for tenure.
- c. The department chairperson will submit the names of the committee members to the Dean.
- d. If the department does not have five tenured members, the candidate will submit to the Dean of the College of Arts and Sciences a list of tenured members of other University departments. The list shall be at least twice that number lacking in the candidate's department. From it, the Dean, together with the CCPT, will make the final selection.
- e. All department members are encouraged to submit recommendations on tenure to the departmental tenure committee. These recommendations become part of the candidate's file and are submitted with the file to the Dean.
- f. The decision of the departmental committee will be forwarded to the Dean of the college through the department chairperson, who will also transmit their recommendation.
- g. The Dean of the College of Arts and Sciences will make available all submitted material to the College Committee on Promotion and Tenure for its consideration. The College Committee on Promotion and Tenure will provide copies of its recommendations to the candidate at the time it submits its recommendations to the Dean of the College. Upon receipt of the College Promotion and Tenure Committee recommendations, the Dean will submit to the Vice President for Academic Affairs their recommendations together with the recommendations of the College Promotion and Tenure Committee, the department chairperson, and the departmental committee.
- h. In cases where candidates are awarded tenure but do not earn the rank of Associate Professor, the faculty member, in collaboration with the department chair, dean, and/or Vice President for Academic Affairs, will work in a consensual process to help the faculty member reach the professional level where promotion may be obtained.