## Minutes West Virginia University Faculty Senate Monday, September 14, 2020

1. Nathalie Singh-Corcoran, Faculty Senate Chair, called the meeting to order at 3:16 p.m. The Senate met by videoconference.

Members Present				
Anderson, K.	Cui, A.	Gross, J.	McCombie, R.	Samuels, H.
Angeline, M.	Davari, A.	Grushecky, S.	McCrory, J.	Sand-Jecklin, K.
Arthurs, J.	Davis, D.	Hamrick, A.	McCusker, B.	Scaife, B.
Bastress, R.	DiBartolomeo, L.	Hardy, S.	McGinnis, R.	Schaefer, G.
Benedito, V.	Donley, D.	Harmon, I.	Momen, J.	Sims, J.
Bernardes, E.	Dotson, S.	Hatipoglu, K.	Morgan, J.	Singh-Corcoran, N.
Bernstein, M.	Downes, M.	Hauser, D.	Morris, T.	Soccorsi, A.
Bhandari, R.	Eades, D.	Hessl, A.	Murphy, E.	Squire, D.
Billings, H.	Elliott, E.	Hibbert, A.	Myers, S.	Steele, J.
Bonner, D.	Ellison, M.	Hileman, S.	Nguyen, Y.	Tack, F.
Bragg, R.	Elswick, D.	Hodge, J.	Nix, A.	ter Haseborg, H.
Bravo, G.	Eubank, T.	Honaker, L.	Nutter, R.	Toppe, M.
Bresock, K.	Evans, J.	Hudgins, C.	Ogden, L.	Tu, S.
Bryner, R.	Evans, K.	Hutson, Z.	Olfert, M.	Valentine, K.
Burnside, J.	Famouri, P.	John, C.	Olson, K.	Vanderhoff, J.
Burt, A.	Feaster, K.	Kelly, K.	Orr, E.	Vercelli, M.
Butina, M.	Fleming, S.	Kitchen, S.	Peckens, S.	Watson, J.
Casey, R.	Fullen, M.	Klein, A.	Perhinschi, M.	Wayne, S.
Celikbas, E.	Funk, A.	Kupec, J.	Petrone, A.	Welsh, A.
Chantler, P.	Galvan-Turner, V.	Law, K.	Phillips, T.	Willard, M.
Chisholm, S.	Galvez, M.	Leary, M.	Rakes, P.	Williams, D.
Cohen, S.	Geldenhuys, W.	Li, H.	Reddy, R.	Woloshuk, J.
Costas, M.	Gilleland, D.	Mallow, J.	Renzelli-Cain, R.	Woods, S.
Cottrell, L.	Goodykoontz, E.	Marra, A.	Rogers, T.	Young, S.
Crichlow, S.	Graziani, G.	Martucci, A.	Ryan, E.	Zegre, N.
Cronin, A.			•	
Members Excuse	<u>d</u> :			
Clemmer, M.	Corio, E.	Germana, M.	Schimmel, C.	
Members Absent	:			
Dilcher, B.	McKibben, J.	Reece, R.	Sealey, V.	Swager, L.
Holbein, M.	Miltenberger, M.	Rice, T.	Sedney, C.	
Hornsby, G.	Mucino, V.	Sabolsky, E.	Shrader, C.	
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Faculty Senate O	fficers Present:			
Hauser, D.	Hileman, S.	Murphy, E.	Nutter, R.	Singh-Corcoran, N.
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- 2. Chair Singh-Corcoran moved for approval of the minutes from the Monday, July 28, 2020 meeting. Motion carried.
- 3. President Gordon Gee commented on the decision to pause in-person, undergraduate instruction and the factors that went into making that decision. He expressed his appreciation for the way faculty have risen to this challenge.

- 4. Provost Maryanne Reed reported the following:
  - The switch to online instruction resulted from the spike in cases that occurred when students returned. We received an SOS from the county health department saying that, at a certain point in September, they were not able to keep up with contact tracing.
  - Whether we return to face-to-face instruction September 28 is dependent on being able to control the spread of the virus and to hold students accountable who engage in irresponsible behavior.
  - Our goal is to make a decision about the Spring 2021 semester before we announce the spring schedule on October 8.
  - Our enrollment numbers are fairly stable. We had an 8% decline in first time freshman, but an overall decline of just 3% of our enrollment. That has a lot to do with the increase in our retention and persistence rates and part of that is, we think, because we suspended our suspension policy in the spring.
  - Our graduate enrollments are up slightly and our enrollment in fully online programs is up 17%.
  - We have 141 new faculty who are here learning the ropes in a very strange environment.
  - We had a 7% increase in external funding in July.
  - We are not going to be announcing the call for nominations for honorary degree candidates this
    fall. Since we did not have an in-person commencement, we have a backlog of honorees from
    spring.
  - The university is making progress in addressing issues of institutional racism and racial inequality at WVU. The top action items from the committees will be released soon, along with the corresponding timelines and website updates.
- 5. Amanda DeBastiani, Special Liaison to the Provost for the Incident Command Center, discussed the process that takes place once a student tests positive for COVID-19 or is considered to have a contact that requires them to quarantine.
- 6. Faculty Senate Chair Nathalie Singh-Corcoran reported the following:
  - Faculty have requested senate presentations on issues such as intellectual property rights as they apply to course material, so she has asked Ryan Watson and Stephanie Taylor from the Office of General Counsel to present at the November 9 senate meeting.
  - Faculty have also asked for more information and support on accessible teaching, especially in online environments. She has invited members of the Office of Accessibility Services to present at the October 12 senate meeting.
  - She has also made some headway on plans to improve communication between the senate and the broader faculty. She met with the chair of Penn State's faculty senate to gather information about their two-way communication system; they use a message board, which is one tool that we are exploring. She, Ashley Martucci, Emily Murphy, and Dave Hauser also met with Kimberly Becker, the director of communications for the Provost Office, and with librarians Ian Harmon and Jane LaBarbara, who are helping us think through information management more broadly.
  - Over the past several weeks, colleagues in distress have reached out to her, Emily Murphy,
    Ashley Martucci, Dave Hauser, Lisa Di Bartolomeo, and others. So, a few weeks ago she
    shared an article on faculty burnout with President Gee. Another article on burnout has since
    appeared in Inside Higher education. Both texts suggest some principles that we can follow as
    an institution and some actions our leaders can take to support us. She quoted the Inside Higher

Education article. The first suggestion is to acknowledge that things are not normal. The second is to respect childcare and other personal needs. The third is that we need to triage what work is essential and reasonable. The fourth is that we need to demonstrate flexibility in reviewing faculty accomplishments. The fifth, which is especially for our leaders, is to invite faculty to talk about their experiences. Listen to what they need and respond to those needs in tangible ways. The author states that burnout is often the result of multiple and repeated institutional decisions that are made beyond and outside a faculty member's control. So, in the spirit of shared governance, she implored our chairs, our deans, our provost, and our president to listen to and support faculty and to invite us into conversations about spring planning or whatever else is on the horizon, so that decision making about teaching, teaching, research, and service does not solely rest in the hands of a few.

- 7. A motion was made and seconded to approve Annex IA, Special Rules of Order for Electronic Meetings. Motion carried by a vote of 94-0.
- 8. Ann Marie Hibbert, Chair-Elect of the Committee on Committees, Membership and Constituencies, moved for approval of the following report. <u>Motion carried</u> by a vote of 94-0 following corrections to the faculty rank and senator/non-senator status of several appointees.

Annex I, Committee Appointments.

- 9. Jen Steele, Chair of the Curriculum Committee, reported that the committee has met twice so far this semester. To encourage higher quality submissions, they are working on ways to provide more guidance to units as they develop their proposals.
- 10. Lisa Di Bartolomeo, Chair of the General Education Foundations Committee, reported that the committee has held one meeting so far. They will continue to approve new courses and to review changes to existing GEF courses. The committee also decided, in their ongoing work to aid in the Provost Office assessment of GEF, to look at area 7 with a view to strengthening the diversity representation there.
- 11. Jessica Vanderhoff, Chair of the Teaching and Assessment Committee, submitted the following reports for information. Reports filed.

Annex II, Early Semester, Teaching Assessment Pilot Annex III, Email Announcements

12. The following 2019-2020 Committee Reports and 2020-2021 Goals were submitted by their respective committee representatives. Reports filed.

Annex IV, Committee of Retired Faculty

Annex V, Committee on Committees, Membership and Constituencies

Annex VI, Curriculum Committee

Annex VII, Faculty Welfare Committee

Annex VIII, General Education Foundations Committee

Annex IX and Annex IXA, Inclusion and Diversity Committee

Annex X, Library Committee

Annex XI, Research Integrity Committee

Annex XII, Research and Scholarship Committee

Annex XIII, Service Committee

Annex XIV, Shared Governance Committee

Annex XV, Annex XVA, Annex XVB, and Annex XVC, Sustainability Committee

Annex XVI, Teaching and Assessment Committee

- 13. Roy Nutter, Faculty Representative to State Government, reported that the Higher Education Policy Commission meets on September 18, 2020. He mentioned three agenda items that may be of interest: review of institutional operating and capital budgets, approval of fiscal year 2020 Research Challenge Fund annual report, and report on master's degree programs. The Advisory Council of Faculty will also meet on September 18.
- 14. Stan Hileman, BOG Representative, reported that the Board of Governors held a special meeting on September 4, 2020. The Board voted to authorize negotiations to restructure the current agreement with Learfield IMG College relating to West Virginia University athletics multi-media and sponsorship rights. The next regular meeting of the Board is scheduled for September 18.
- 15. New Business: A motion was made and seconded to form an ad-hoc committee to look into third-party classroom management tools, in partnership with the Teaching and Learning Commons, with an eye towards recommending common platforms to the Provost's office. Members would be solicited among volunteers from the Senate." Motion carried by a vote of 70-2.
- 16. The meeting adjourned at 5:28 p.m. to reconvene on Monday, October 12, 2020.

Judy Hamilton
Office Administrator

#### **Standing Rules for Electronic Meetings**

According to the preamble of the West Virginia University, Faculty Senate Constitution, "It is recognized that legal authority to guide and regulate the University is vested by the West Virginia Legislature in the West Virginia University Board of Governors through the President of the University." As directed by the President, large face-to-face gatherings during the COVID-19 pandemic will be suspended. Therefore, the Faculty Senate will suspend face-to-face meetings during the COVID-19 pandemic and will instead conduct electronic meetings.

The following rules are in accordance with *Roberts Rules of Order, Newly Revised, 12<sup>th</sup> ed.* which provides "Sample Rules for Electronic Meetings" (Appendix).

Standing Rules for Electronic Meetings:

- 1. Login information. The Faculty Senate Office shall send by e-mail to every member of the senate, at least three business days before each meeting, the time of the meeting, the URL and codes necessary to connect to the internet meeting service, and as an alternative and backup to the audio connection included within the internet service, the phone number and access code(s) the senator needs to participate aurally by telephone. The Faculty Senate Office shall also include a copy of or link to these rules.
- **2. Login Time**. The Teaching and Learning Commons shall schedule internet meeting service availability to begin at least 15 minutes before the start of each meeting.
- **3. Signing in and out**. Senators shall identify themselves as required to sign-in to the internet meeting service and shall maintain internet and audio access through the meeting whenever present but shall sign out upon any departure before adjournment.
- **4. Quorum calls**. The presence of a quorum shall be established by senator check-in at the time of the meeting. Thereafter, the continued presence of a quorum shall be determined by the online list of participating senators.
- **5. Technical requirements and malfunctions**. Each senator is responsible for their audio and internet connections; no action shall be invalidated on the grounds that the loss of, or poor quality of a member's individual connections prevented participation in the meeting.
- **6. Forced disconnections**. The chair may cause or direct the disconnection or muting of a senator's connection if it is causing undue interference with the meeting. The chair's decision to do so, which is subject to an undebatable appeal that can be made by any senator, shall be announced during the meeting and recorded in the minutes.
- 7. Assignment of the floor. To seek recognition by the chair, a senator shall raise their hand using the internet meeting service's hand-raise feature. Upon assigning the floor to a senator, the chair shall clear the online queue of the senator who has the floor. All other senators whose hands are raised will remain in the queue and will be recognized in the order that their hands were raised.
- **8. Interrupting a member.** A senator who intends to make a motion or request that under the rules may interrupt a speaker shall use the chat box for so indicating and shall

- thereafter wait a reasonable time for the chair's instructions before attempting to interrupt a speaker by voice.
- 9. Motions submitted in writing. A senator intending to make a main motion, to offer an amendment, or to propose instructions to a committee, shall, before or after being recognized, post the motion in writing to the online area designated by the Faculty Secretary for this purpose, preceded by the member's name and a number corresponding to how many written motions the member has so far posed during the meeting (e.g. Mitchell 1; Vasquez 3). Use of the online area designated by the Faculty Secretary for this purpose shall be restricted to posting the text of intended motions.
- 10. Display of motions. The Faculty Secretary shall designate an online area exclusively for the display of the immediate pending question and other relevant pending questions (such as the main motion, or the pertinent part of the main motion, when an amendment to it is immediately pending); and, to the extent feasible, the Faculty Secretary, or any assistants appointed by them for this purpose, shall cause such questions, or any other documents that are currently before the meeting for action or information, to be displayed therein until disposed of.
- 11. Voting. Votes shall be taken via the internet meeting service's hand-raise feature. Prior to a call for votes, the chair will clear the queue of any hands raised for recognition to the floor. The chair's announcements of voting results shall include the number of members voting on each side of the question and the number, if any who explicitly respond to acknowledge their presence without casting a vote. Business may also be conducted by unanimous consent. In the instances where anonymous voting is needed, an anonymized electronic poll will be used.
- **12. Video display.** The Teaching and Learning Commons shall cause a video of the chair to be displayed throughout the meeting and shall also cause display of the video of the member currently recognized to speak or report.

# **Standing Committees**

# **Faculty Welfare**

First Name	Last Name	Email Address	Faculty Rank	Primary Constituency Appointment	Current Senator	Role (chair, chair-elect, member)
Maria	Kolar	maria.kolar@hsc.wvu.edu	Professor	Medicine	Yes	Chair
Scott	Crichlow	rscrichlow@mail.wvu.edu	Associate Professor	Eberly	Yes	Member
Scott	Wayne	scott.wayne@mail.wvu.edu	Associate Professor	Statler	Yes	Member
Amy	Welsh	amy.welsh@mail.wvu.edu	Associate Professor	Davis	Yes	Member
Donna	Ballard	Donna.Ballard@mail.wvu.edu	Professor	Potomac State	Yes	Member
Asad	Davari	Asad.Davari@mail.wvu.edu	Professor	WVUIT	No	Member
Daniel	Brewster	daniel.brewster@mail.wvu.edu	Instructor	Eberly	No	Member
Jeremy	Roberts	jeremy.roberts@mail.wvu.edu	Assistant Professor	Chambers	No	Member
Sarah	Stiles	sstiles1@hsc.wvu.edu	Instructor	Nursing	No	Member
Angela	Munroe	angela.munroe@mail.wvu.edu	Associate Professor	CAC	No	Member

### **Inclusion & Diversity**

First Name	Last Name	Email Address	Faculty Rank	Primary Constituency Appointment	Current Senator	Role (chair, chair-elect, member)
Keri	Valentine	Keri.valentine@mail.wvu.edu	Associate Professor	CEHS	Yes	Chair
Cerasela	Dinu	zcdinu@mail.wvu.edu	Professor	Engineering	No	Chair-Elect
Scott	Crichlow	rscrichlow@mail.wvu.edu	Associate Professor	Eberly	Yes	Member
Malayna	Bernstein	malayna.bernstein@mail.wvu.edu	Service Associate Professor	CEHS	Yes	Member
Marina	Galvez Peralta	magalvezperalta@hsc.wvu.edu	Teaching Assistant Professor	Pharmacy	Yes	Member
Dave	Hauser	david.hauser@mail.wvu.edu	Teaching Associate Professor	Eberly	Yes	Member
Heather	Billings	hbillings@hsc.wvu.edu	Teaching Associate Professor	Medicine	Yes	Member
Stefanie	Hines	stefanie.hines@mail.wvu.edu	Teaching Assistant Professor	Davis	No	Member
Erin	Kelley	erin.kelley@mail.wvu.edu	n/a	TLC Representative	No	Member
Tiffany	Mitchell Patterson	tiffany.mitchell@mail.wvu.edu	Assistant Professor	CEHS	No	Member
Ellen	Belchoir Rodrigues	ellen.rodrigues@mail.wvu.edu	Service Assistant Professor	Eberly	No	Member
Jessica	Morgan	jessica.morgan2@mail.wvu.edu	Associate Professor	Creative Arts	Yes	Member
Denis	Scott	denis.scott@mail.wvu.edu	Extension Associate Professor	Extension	No	Member
Jerry	Carr	jcarrjr@gmail.com	n/a	NAACP	No	Ex officio
Jay	Spenser Darden	jdarden@mail.wvu.edu	n/a	DEI	No	Ex officio
Dariane	Drake	dariane.drake@mail.wvu.edu	n/a	CEHS	No	Student Rep

# Library

First Name	Last Name	Email Address	Faculty Rank	Primary Constituency Appointment	Current Senator	Role (chair, chair-elect, member)
Denis	Scott	Denis.Scott@mail.wvu.edu	Extension Associate Professor	Extension	Yes	Member
Brian	Scaife	bscaife@hsc.wvu.edu	Assistant Professor	Medicine	Yes	Chair 20-21
Jing	Qiu	jing.qiu@mail.wvu.edu	Associate University Librarian	Libraries	No	Member
Mary	Stamatakis	mstamatakis@hsc.wvu.edu	Senior Associate Dean	Pharmacy	No	Member
Mollie	Торре	mollie.toppe@mail.wvu.edu	Extension Instructor	Extension	Yes	Member
Jessica	McMillen	jessica.mcmillen@mail.wvu.edu	Associate University Librarian	Libraries	Yes	Member
Rose	Casey	rose.casey@mail.wvu.edu	Assistant Professor	Eberly	Yes	Member
Yogen	Panta	Yogendra.Panta@mail.wvu.edu	Associate Professor	Beckley	No	Member
Marina	Galvez-Peralta	magalvezperalta@hsc.wvu.edu	Teaching Assistant Professor	Pharmacy	Yes	Member

# **Research Integrity**

First Name	Last Name	Email Address	Faculty Rank	Primary Constituency Appointment	Current Senator	Role (chair, chair-elect, member)
			Associate			
Scott	Wayne	Scott.Wayne@mail.wvu.edu	Professor	Statler	Yes	Chair
			Associate			
Ann Marie	Hibbert	annmarie.hibbert@mail.wvu.edu	Professor	Chambers	Yes	Chair-Elect
Radhey	Sharma	Radhey.Sharma@mail.wvu.edu	Professor	Statler	No	Member
Bob	Bastress	Robert.bastress@mail.wvu.edu	Professor	Law	Yes	Member
			Asociate			
Patrick	Kerr	pkerr@hsc.wvu.edu	Professor	Medicine	No	Member
			Associate			
Sarah	Farris	sarah.farris@mail.wvu.edu	Professor	ECAS	No	Member
			Assistant			
Debanjan	Das	debanjan.das@mail.wvu.edu	Professor	Davis	No	Member
Asad	Davari	adavari@wvu.edu	Professor	WVUIT	No	Member
			Associate			
Melanie	Clemmer	mclemmer@hsc.wvu.edu	Professor	Medicine	Yes	Member
			Associate			
Karen	Weiss	karen.weiss@mail.wvu.edu	Professor	ECAS	No	Member
			Associate			
Melissa	Luna	melissa.luna@mail.wvu.edu	Dean	CEHS	No	Member
			Associate			
Mark	Nigrini	mark.nigrini@mail.wvu.edu	Professor	Chambers	No	Member

# **Special Committees**

#### **Shared Governance**

First Name	Last Name	Email Address	Faculty Rank	Primary Constituency Appointment	Current Senator	Role (chair, chair-elect, member)
Scott	Crichlow	scott.crichlow@mail.wvu.edu	Associate Professor	Eberly	Yes	Chair
Ednilson	Bernardes	ednilson.bernardes@mail.wvu.edu	Professor	Chambers	Yes	Member
Michael	Vercelli	michael.vercelli@mail.wvu.edu	Associate Professor	Creative Arts	Yes	Member
Keri	Valentine	Keri.valentine@mail.wvu.edu	Associate Professor	CEHS	Yes	Member
Samuel	White	swwhite@mail.wvu.edu	Extension Professor	Extension	No	Member
Jessica	McMillen	jessica.mcmillen@mail.wvu.edu	Associate University Librarian	Libraries	Yes	Member
Julia	Fraustino	jdfraustino@mail.wvu.edu	Assistant Professor	Media	Yes	Member
Kari	Sand-Jecklin	ksandjecklin@hsc.wvu.edu	Associate Professor	Nursing	Yes	Member
Gonzalo	Bravo	gonzalo.bravo@mail.wvu.edu	Associate Professor	Physical Activity and Sport Sciences	Yes	Member
Ruchi	Bhandari	rbhandari@hsc.wvu.edu	Assistant Professor	Public Health	Yes	Member
Jean	Woloshuk	jean.woloshuk@mail.wvu.edu	n/a	(Retired)	No	Member
Andrew	Nix	Andrew.Nix@mail.wvu.edu	Associate Professor	Statler	Yes	Member
Paul	Rakes	Paul.Rakes@mail.wvu.edu	Professor	WVUIT	Yes	Member
Emily	Murphy	Emily.Murphy@mail.wvu.edu	Extension Professor	Extension	No	Member

# Sustainability

First Name	Last Name	Email Address	Faculty Rank	Primary Constituency Appointment	Current Senator	Role (chair, chair-elect, member)
Shawn	Grushecky	Shawn.Grushecky@mail.wvu.edu	Assistant Professor	Davis	Yes	Chair
Andrea	Soccorsi	andrea.soccorsi@mail.wvu.edu	Teaching Instructor	Eberly	Yes	Chair-Elect
Amy	Hessl	amy.hessl@mail.wvu.edu	Professor	Eberly	Yes	Member
Julie	Black	Julie.Black@mail.wvu.edu	n/a	TLC	No	Member
Traci	Knabenshue					Member
Brandon	Rothrock	bar0044@mix.wvu.edu	n/a	n/a	No	Member
Kirsten	Stephan	kirsten.stephan@mail.wvu.edu	Teaching Assistant Professor	Davis	No	Member
Fernando	Lima	fernando.lima@mail.wvu.edu	Associate Professor	Statler	No	Member
Thanh	Le	Thanh.Le@mail.wvu.edu	n/a	Student Engagement	No	Member
Semoa	De Sousa-Brown	semoa.desousa-brown@mail.wvu.edu	n/a	RBA	No	Member
Daniel	Grossman	Daniel.Grossman@mail.wvu.edu	Assistant Professor	Chambers	No	Member
Brian	Chang	Brian.Chang@mail.wvu.edu	n/a	Chambers	No	Member
Jason	Walls	Jason.Walls@mail.wvu.edu	n/a	Law	No	Member

#### WVU Faculty Senate Teaching & Assessment Committee, Spring 2020

# **Early Semester Teaching Assessment Pilot**

To make this course most relevant and supportive of your learning, I would appreciate your completion of this early semester survey.

- 1. Which **best** describes this course for you?
  - a. Requirement
  - b. Elective
  - c. General Education Foundation (GEF) course
  - d. Other [text box]
- 2. I have understood the course concepts and material presented up to this point.

Strongly agree	Agree	Undecided	Disagree	Strongly disagree
agree				albabice

Display Logic (if any disagree, display the following)

- 2a. (Open-ended) Your response to the last question suggests that you are confused or frustrated by one or more of the concepts we have covered in class. Please elaborate.
- 3. The instructor clearly communicates course goals and expectations.

Strongly Agree	Undecided	Disagree	Strongly disagree
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4. The instructor explains the subject matter clearly.

Strongly agree	Agree	Undecided	Disagree	Strongly disagree
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5. The way the instructor conducts this class keeps me engaged in the learning process.

Strongly	Agree	Undecided	Disagree	Strongly
agree	Agree	Onacciaca	Disagree	disagree

Display Logic (if any agree, display the following)

5a. (Open-ended) Describe a time in this class when you felt the **most engaged** in the learning process.

Display Logic (if any disagree, display the following)

5b. (Open-ended) Describe a time in this class when you felt the **least engaged** in the learning process.

6. There are sufficient opportunities (e.g. homework, work in progress, class discussions, group work, in-class or online exercises, etc.) to practice what I am learning.

Strongly	Agree	Undecided	Disagree	Strongly
agree	Agree	Ondecided	Disagree	disagree

7. Graded assignments (e.g. homework, quizzes, tests, etc.) are a fair and appropriate representation of what we are learning.

Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Not applicable to this course at
					this time.

8. The feedback I receive from the instructor is helping me learn.

Strongly Agree	Undecided	Disagree	Strongly disagree	Not applicable to this course at this time.
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Open-ended Questions:

- 9. What has been most helpful to your learning experience in this class so far?
- 10. Please describe ways that I (as your instructor) can better support your learning experience in this class.

#### 1. EMAIL ANNOUNCEMENT – FACULTY – IMMEDIATE RELEASE

Dear Instructor,

The Teaching and Assessment Faculty Senate Committee (TACo) has developed an Early Semester Teaching Assessment tool for you to solicit student feedback in your courses. Asking students to provide constructive feedback early in a course can be an effective method of assessing instruction. Early assessment provides students a way to indicate what is working well for them in the class as well as areas where they are struggling or have concerns. Early semester check-ins provide instructors opportunities to respond accordingly while courses are still in progress.

The Early Teaching Assessment was developed by a TACo working group during the 2019-20 academic year. The group conducted a meta-analysis of pre-existing literature and early semester and midterm student evaluation of instruction survey questions used at peer institutions. After thorough consideration, the final subset of questions on the Early Teaching Assessment were deemed most applicable for WVU instructors and students.

While participation in this pilot is strongly encouraged, you will need to voluntarily opt in to participate. The tool is designed for traditional 15-week courses that are assigned to a single instructor. If you teach multiple courses, you can choose which classes receive the survey. In the future, TACo will explore variations of the tool for courses with multiple instructors and/or that follow different calendars.

The best time to gather feedback for a course in progress is in the first 4-6 weeks of a 15-week course. This timeframe gives students a reasonable sample of how you teach and how their learning is evaluated to make substantive comments. It allows you time to make adjustments and see their impact. Therefore, the form should be distributed well before midterm grades are issued.

Results from this survey will give you the information you need to reflect on your current teaching practices, clarify student misunderstandings, and engage students in a way that enhances the overall learning experience. You will receive your individual report 2 to 3 business days following the closing date. TACo recommends that, after analyzing the survey results, you share the findings with your students and that you have a conversation about their suggestions and your teaching adjustments. This can be done in class, through video, or in written format.

**Course results will be shared with the assigned instructor** *only*. Anonymized and aggregated summaries will be shared with various University stakeholders, such as the Office of the Provost, Faculty Senate, and Teaching and Learning Commons.

To see a pdf version of the tool, click here.

The survey window for the Fall 2020 semester is Monday, September 14, 2020 to Thursday, October 1, 2020. You will receive an email on Monday, September 14, 2020 to activate your assessment(s). After you opt in, you will be requested to identify a shorter survey window that suits your needs (i.e. the first and last day the survey will be available to YOUR students). You will receive your individual report 2 to 3 business days following the closing date. Please take the opportunity to administer this early semester teaching assessment survey to your students.

If you have any questions, please email <u>Jessica Vanderhoff</u>, Chair, Teaching & Assessment Faculty Senate Committee.

Thank you,

Teaching & Assessment Faculty Senate Committee

#### 2. EMAIL ANNOUNCEMENT - FACULTY - OPT-IN EMAIL

Dear [Instructor Name],

The Teaching and Assessment Faculty Senate Committee (TACo) has developed an Early Semester Teaching Assessment tool for you to solicit student feedback in your courses. Early assessment provides students a way to indicate what is working well for them in the class as well as areas where they are struggling or have concerns. Early semester check-ins provide instructors opportunities to respond accordingly while courses are still in progress. The tool is designed for traditional 15-week courses that are assigned to a single instructor.

While participation in this pilot is strongly encouraged, you will need to voluntarily opt in to participate. If you teach multiple courses, you can choose which classes receive the survey. Please use the link below to participate.

The survey window for the Fall 2020 semester is Monday, September 14, 2020 to Thursday, October 1, 2020. After you opt in, you will be requested to identify a shorter survey window that suits your needs (i.e. the first and last day the survey will be available to YOUR students). You will be able to access your individual course report(s) 2 to 3 business days following YOUR closing date via <a href="http://it.wvu.edu/sei">http://it.wvu.edu/sei</a>.

TACo recommends that, after analyzing the survey results, you **discuss the findings with your students** and that you have a conversation about their suggestions and your teaching adjustments. This can be done in-class, through video, or in written format.

If you have any questions, please email <u>Jessica Vanderhoff</u>, Chair, Teaching & Assessment Faculty Senate Committee.

Thank you,

Teaching & Assessment Faculty Senate Committee

#### 3. EMAIL ANNOUNCEMENT – STUDENT

Dear [Student Name],

As part of WVU's focus on high-quality education and improving student learning experiences, we ask you to complete the Early Semester Teaching Assessment for the following course(s):

[Insert Table of Course here]

This survey is an opportunity to share with your instructor what is working well in this course as well as challenges to your learning. Honest, professional, and constructive feedback is expected.

You may skip any question that you do not wish to answer. Please click the "Submit" button after you complete the survey. You will receive a separate survey for each course being assessed.

If you have questions, comments, or concerns, please submit a ticket at ITS Service Desk.

Thank you,

Teaching & Assessment Faculty Senate Committee

West Virginia University

**DATE:** April 25, 2020

**TO:** Judy Hamilton

Office Administrator

**Faculty Senate** 

**FROM:** Stanley Cohen

**Professor Emeritus** 

Eberly College of Arts and Sciences

Committee of Retired Faculty

Jean Woloshuk Professor Emeritus Extension Service

Committee of Retired Faculty

**RE:** Committee of Retired Faculty

2019-2020 Annual Report to the Faculty Senate

The Committee of Retired Faculty's (CRF) main mission is to represent and advocate on behalf of WVU's retired faculty members. CRF was established by the West Virginia University Faculty Senate over twenty-five years ago as part of the shared governance of the University. To this end the Committee is charged to:

- Advocate on issues affecting retired faculty.
- Provide expertise and representation on committees, councils, boards and panels where experience of retired faculty can best benefit the university. In this regard the CRF provides institutional memory relevant to the university community.
- Study and provide recommendations to the Faculty Welfare Committee and Faculty Senate on matters pertaining to retired faculty including alternative retirement patterns and benefits.
- Hold monthly programs and other sessions on topics of importance and interest to retired faculty, many of which entail retired faculty members' academic expertise and experience.
- Develop and implement other programs of interest to retired faculty.
- Continue connections with WVU retired faculty by communicating and eliciting their feedback on issues pertaining to their welfare and university standing.
- Provide two members from the CRF to be voting members of the Faculty Senate and its Faculty Welfare Committee.

The Committee has historically provided monthly talks open to retired faculty and others in the community on a variety of subjects. Recent developments by the Osher Lifelong Learning Institute (OLLI @ WVU) and the West Virginia University Retirees Association (WVURA) have created an opportunity to refocus the CRF on its Senate charge.

OLLI @ WVU was established to provide programs and educational opportunities designed for adults 50 and over. During four terms, each year, it offers courses, lectures, seminars and field trips in such areas as music, literature, art, science, politics, nature, history, health, medicine, and economics. Live drama, movies, and special interest groups add to the choices. These programs are open to OLLI @ WVU members. WVU Retired Faculty are encouraged to join.

The West Virginia University Retirees Association (WVURA) was recently established with the goal of providing opportunities for the membership to remain involved with the University community and with other retirees through activities to include, but not limited to, programs, interest groups, travel, volunteerism, health and financial seminars, and cultural and social events. The WVURA is open to all faculty and staff members who are retired and current employees who are in phased retirement or who meet retirement eligibility from West Virginia University (age 60 with 5 years of service or any age with 30 years of service), as well as retirees of the WVU Foundation and the WVU Research Corporation. Spouses and partners are also welcome to join.

#### 2019-20 Committee of Retired Faculty Board Members

Below is a list of including (in parenthesis) their term expiration. Those whose terms expire this year will be reappointed unless they notify the Chair otherwise by the June meeting.

- Stan Cohen, Eberly Arts & Sciences (2020-2021), Chair, Faculty Senator
- Rumy Hilloowala, Medicine (2019-2020)
- Nora MacDonald, Design and Community Development (2020-2021)
- Ade Neidermeyer, Chambers Business and Economics (2020-2021)
- Allyson McKee, Libraries (2020-2021)
- Bernie Schultz, Creative Arts (2020-2021)
- George Trapp, Statler Engineering (2019-2020), Chair-Elect
- Jean Woloshuk, Extension (2019-2020), Faculty Senator
- Bonnie Anderson, President's Office, ex-officio
- Toni Christian, Ginger Burns, Talent and Culture, ex-officio
- Billy Coffindaffer, Village at Heritage Point, ex-officio
- Rachel Zadnik, WVU Foundation, ex-officio
- Elaine Sholtis, WVU Retirees Association, ex-officio

#### **Accomplishments**

As in the past, this year the Committee of Retired Faculty held monthly programs at the Village at Heritage Point's Great Room. Dates of programs are published via e-mail, WVU E-News, Dominion Post, OLLI Friday Newsletter, and WVURA announcements to retired faculty. (See list below.) Refreshments are thankfully provided through the generosity of the WVU Foundation. Starting last year, monthly program events are now coordinated and jointly planned with OLLI, the Village at Heritage Point and the WVUREA. Typically, the CRF will sponsor eight programs during the year.

Throughout the year we conducted a business meeting (and lunch) and heard several informational reports at our monthly meeting (occurring on the third Friday):

- On September 25, 2019 President Gee, several senior leadership members, and directors of several units held a faculty and staff retiree reception at the Blaney House including an open Q & A session. CRF through the assistance of Bonnie Anderson arranged the event.
- Jean Woloshuk was elected to serve on the Faculty Senate AD Hoc Shared Governance Committee.
- Ginger Burns from Talent and Culture (T & C) spoke about her role as a senior benefits specialist.
- Provost Maryann Reed attended a CRF meeting in September followed by Associate Provost Melissa Latimer. The discussions covered several topics including retiree housing availability; additional funding for OLLI and WVURA; and roles and opportunities for retirees to re-engage with their former units and at WVU.
- Ade Neidermeyer, president of WVURA, and acting on the behalf of CRF and WVURA, met several times with T & C to develop an assessment form which would indicate the possible ways retirees could volunteer at WVU. This form is near final development.
- The Committee elected George Trapp as 2019-2020 chair-elect.
- Due to state-wide policies and the VHP lock-down regarding Covid-19 Pandemic, the Committee did not meet in the months of March and April. A possible Virtual May meeting might occur depending on the impending agenda.

#### Goals 2019-2020

The CRF will continue to coordinate as necessary its monthly lecture series with OLLI and the WVURA. CRF will rely on the WVU Foundation to continue its sponsorship of the refreshments available at the monthly program.

- 1. The CRF programs will be communicated to the WVU Retiree Association members, through e-mail, website and calendar. Additionally, any other communications to retired faculty, including quarterly newsletters as such, will be sent through the same mechanism.
- 2. The CRF will continue to compile a list of benefits and opportunities offered to retired faculty at WVU.
- 3. The CRF will refocus its attention to the Committee Charge provided by the WVU Senate.
- 4. The CRF will meet on a monthly or bimonthly basis, unless circumstances necessitate otherwise.

#### **Programs 2019-2020**

September 2019, Matthew Clark, Director of Planned Giving, WVU Foundation, "Cutting Out Uncle Sam: Smart Ideas to Plan Your Legacy"

October 2019, Joel Thacker, Account Manager, PEIA/Humana, "Humana Plans and Benefits" January 2020, Jan L. Powell, Communications Director, PEIA, "A Review of PEIA Retirees for 2020

- February 2020, Lori Hostuttler, Assistant Director WV and Regional History Center, WVU Libraries, "Black History Month: Pioneers in West Virginia"
- March 2020, H. R. Scott, County Program Coordinator, Extension Agent, Agricultural and Natural Resources, WVU Extension Services, Monongalia County, "The Changing Face of Monongalia County Extension"
- April and May 2020 programs postponed due to Covid-19 Pandemic. Will resume when the Village at Heritage Point resumes its normal schedule.

# Committee of Committees, Membership, and Constituencies 2020 Annual Status Report

#### **Committee Members**

Lesley Cottrell, Medicine, Chair
Michael Germana, Eberly, Chair-Elect
Carolyn Atkins, Past-Chair, CEHS
Ilkin Bilgesu, Statler College
Annie Cui, Chambers College
David Hauser, Faculty Secretary, ex officio, Eberly
Emily Murphy, Faculty Senate Chair, ex officio, Extension
Nathalie Singh-Corcoran, Faculty Senate Chair-Elect, ex officio, Eberly College

#### **Committee Charge**

The Committee on Committees, Membership and Constituencies is a constitutional committee. Its size and membership shall be determined by the Senate Executive Committee subject to the approval of the Senate. It shall be the duty of the Committee on Committees, Membership and Constituencies to:

- Annually review and report to the Senate upon the constituencies to be represented within the University Assembly per Article II, Sections 2 and 3, and to recommend such changes as it deems necessary; and
- Secure capable committee members and committee chairs who have experience on their respective committees and to achieve a balance between senior and junior faculty members and among various schools and colleges as much as possible.

#### **Summary**

- Faculty senators were polled regarding their willingness to serve and participate
  on the various Senate committees. Using this information and any additional
  volunteers made known to the COC, the make-up for all Senate committees under
  the control of the COC was determined.
- The COC provided the initial composition for senate committees.
- Committee leadership (Chair and Co-Chairs) were identified and confirmed for committees, where applicable.
- The CoC revisited the composition of the Research and Scholarship Committee ensuring faculty and senators from a variety of disciplines are represented.

#### **Future Work**

- The designated Chair of each committee will contact committee members about committee work closer to the beginning of the next academic year.
- Student Government Association representatives will be contacted to identify student representatives (where applicable) for senate committees in the beginning of the 2020-21 academic year.

To: Faculty Senate Executive Committee

From: Ednilson Bernardes, Chair, Faculty Senate Curriculum Committee

Re: Annual Report 2019-2020 and Goals for 2020-2021

Date: May 18, 2020

#### Committee Members:

Ednilson Bernardes, Chair, B&E Jennifer Steele, Chair-Elect, Eberly

Vagner Benedito, Davis

Ilkin Bilgesu, Statler

Rachel Bragg, WVU Beckley

Sheryl Chisholm, PSC

Anne Cronin, Medicine

Kimberly Floyd, CEHS

Amy Funk, Dentistry

Robin Hissam, Statler

Lori Ogden, Eberly

James Siekmeier, Eberly

Cindi Trickett Shockey, Dentistry

Charis Tsikkou, Eberly

Ralph Utzman, Medicine

Darko Velichkovski, Creative Arts

Melissa Ventura-Marra, Davis

#### Ex-officio Members:

David Hauser, Eberly

Erin Kelley, TLC

Sean McGowan, ex officio, Assistant Registrar

Robynn Shannon, ex officio, TLC

Lou Slimak, ex officio, Provost's Office

Matthew Steele, ex officio, Libraries

Misti Woldemikael, ex officio, Assistant Registrar

Bethany Haymond, Assistant Registrar

The Faculty Senate Curriculum Committee approved the following submissions from September 2019 through May 2020:

New Courses: 213

Course Changes: 259

Course Deletions: 90

Capstones: 7

Course Adoptions: 6

#### AOE: 7

New AOE in Computational Mathematical Science

New AOE in Energy Land Management

New AOE in Mathematics Biology

New AOE in Mathematics Education

New AOE in Physical Applied Mathematics

New AOE in Pure Mathematics

New AOE in Unmanned Aerial Systems

#### Minors: 4

New Minor in International Business

New Minor in Entrepreneurship

New Minor in Arts Entrepreneurship

New Minor in Insurance

#### Majors: 6

BS in Music and Health

Changes to the Major in Entrepreneurship and Innovation

Changes to the Major in Medical Laboratory Science

New Major in Health Services Management and Leadership

Switching from AOE to Major in Russian Studies

New Youth and Family Sciences Major

#### Other Programs: 9

New 3+3 Program ECONBS and LAW

Program Changes to the Certificate in Biomedical Engineering

Program Changes to the BS in Energy Land Management

Program Changes to the Major in Public Health

New Program in Anthropology

New Program in Criminology

New Program in Integrated Marketing Communications

Program Changes to Social Studies/Secondary Education

Program Changes to the Major in Sustainable Food and Farming

#### Goals for 2020-2021:

- 1. Effectively review new courses, course alterations, and course changes.
- 2. Effectively review new undergraduate programs, minors, and areas of emphasis.
- 3. Discuss and elaborate a continuity plan in preparation for disruptive events.
- 4. Discuss whether any aspects of the process can benefit from been done differently.
- 5. Interact and communicate with stakeholders on deadlines, updates, and status.
- 6. Work with the Committee members and other stakeholders to identify opportunities to improve the process where/if fit.

# WVU Faculty Senate Committee on Faculty Welfare Annual Report, 2019-2020

#### **Membership**

Scott Crichlow, Eberly, Chair Samuel Ameri, Statler Donna Ballard, Potomac State Daniel Brewster, Eberly Asad Davari, WVUIT Gretchen Garofoli, School of Pharmacy Jessica Haught, College of Law Kristin Moilanen, CEHS Jessica Morgan, Creative Arts Jenny Murray, Extension Shine Tu, College of Law Scott Wayne, Statler, Past Chair Stan Cohen, ex officio, Retired Faculty Cris DeBord, ex officio, Vice President of Talent & Culture David Hauser, Faculty Secretary, ex officio, Eberly College Amy Matuga, ex officio, Staff Representative James Morris, ex officio, Assistant Vice President of Talent & Culture Natalie Wilson, ex officio, Talent & Culture Amy Kuhn, TLC Representative

There was a leadership change early in the 2019-2020 academic year. Jessica Morgan was to have been Chair for 2019-2020 with Scott Crichlow serving as Chair Elect. Professor Morgan stepped down to take on a larger role in a major professional organization, and Professor Crichlow succeeded into the role of Chair.

#### Committee Charge

The Faculty Welfare Committee is responsible for reviewing, studying, and making appropriate recommendations to the Faculty Senate for all problems and needs of current and retired faculty.

#### Activities

At the direction of Faculty Senate Chair Emily Murphy committee meetings were scheduled on a monthly basis. Given the breadth of the committee's charge and the many matters of interest to various parts of the university community, several matters were addressed across the course of the year including:

1. The latest version of WVU's anti-tobacco policy was reviewed and discussed. Faculty present raised concerns over enforcement issues, and the need to ensure that enforcement

mechanisms would be carried out fairly so that they would be felt equally by staff, faculty, and administrators. Concerns were also raised about the university seeming to push actions that would affect employees' private behavior, away from the workplace.

- 2. The committee returned to the issue of 9-month pay periods and the desire by many faculty members, but not all, to be paid over 12 months. Central administration stated that was impossible given the limitations of personnel software used by the University, unless all faculty members moved to a 12-month pay period. Given that the faculty is divided on this issue, the status quo will hold. However it is worth noting that means the position more generally favored by higher-salaried, more research-intensive faculty is winning out over the position more likely to be favored by lower-salaried faculty members.
- 3. The committee discussed what can be done at WVU to promote Wellness. General points made were the need for this to discuss across campus as a whole, and the need for unified messaging given that there seems to be variation on these matters across WVU. The need for greater availability of appealing, healthy recreation areas was noted. And how food/meals play out in University life should be considered. For example Should there be so many breakfast and lunch meetings given how unhealthy food offerings in those settings often are and the various health issues many faculty members have that make such meetings at a minimum challenging and awkward? Should the University move away from serving sugary items at events and meetings? Should cookies regularly be highlighted as a reward, or ice cream sandwiches be the highlight of campus community bonding activities? Overall, what should the University's approach to the food it provides be, and should eating be part of University life?
- 4. Committee volunteers Scott Crichlow and Scott Wayne met with Teaching and Service faculty members on January 24 so that the committee could learn more about issues facing those sets of faculty (especially concerns relating to pay, tenure, climate, and disparities in situations and practices between faculty who work in different colleges). That meeting covered the many peculiarities of current policies and processes (such as how despite the supposed "One WVU" concept, faculty at the Beckley and Keyser campuses can earn tenure for work similar to TAPs in Morgantown, but those TAPs in Morgantown are not eligible for tenure), and how the Faculty Welfare Committee could work with these faculty members, should they wish to propose policy changes in the Senate.
- 5. Lauri Andress, the Chair of the Inclusion and Diversity Committee, presented that committee's idea for developing Social Equity Teams. These teams, potentially one per under-represented group on WVU's campuses, would serve as a bridge between those communities and WVU's leadership, focusing on 3 core concerns: dialogue, transparency, and accountability. The Faculty Welfare Committee formally endorsed this proposal and looks forward to the Inclusion and Diversity Committee pursuing it further during 2020.
- 6. The committee formally supported the Staff Council's coat drive in the Fall/Winter of 2019/2020.

7. The committee pursued several avenues to try to better understand and overcome the challenges that exist regarding effective intra-university communication.

Toward this end Committee Chair Crichlow surveyed/interviewed (depending on respondent's preference) constituents in Eberly and received the following feedback that was shared with the committee at the November meeting.

The Good

Faculty believe they already possess the knowledge they need to successfully pursue their own careers and achieves promotions.

Areas of Concern

Generally, a lack of transparency by the university on several management topics.

The budget

University priorities (and how policies and spending are designed around them)

Regular hiring (who gets to hire? why? why internal vs. external? etc.)

Hiring of administrators

"Mission creep" by universities (relating to advising, syllabus design, etc.)

Why WVU's BoG seems to have fewer set policies/procedures than many peer institutions

Why WVU's president seems to have more power in setting policy than exists at peer institutions

As much of the above there is often lack of clarity re: - what's the policy/reason behind X & where did it come from and why?

Preferred Forms of Communication

Not email! If anything, cut back on the current number of emails.

Two-sided communication – ideas and information sharing should be direct and run both up and down university hierarchies.

A permanent website should provide details pertinent to increasing faculty understanding of the university (on various matters including some listed above under lack of transparency).

Reform of the Faculty Senate to ensure it is reflecting faculty sentiments, vigorously conveying those, and putting them into university policies.

Committee Chair Crichlow also organized a meeting of the Eberly senators (who wanted to and could attend) with the Dean's Advisory Council in that College to talk through how communication could be improved. That led to the following ideas being shared.

Senators should send out a brief questionnaire once a month to gather faculty concerns and priorities clear in those responses should be shared during "New Business" at every Senate meeting. Similar information could regularly be gleaned from meeting with advisory bodies like the Eberly Dean's Advisory Council across colleges.

There should be more opportunities for face-to-face meetings with deans and senior leaders, and those shouldn't solely be meetings where the administrator sets the agenda.

Faculty Senate Chair Emily Murphy, who has been actively involved in her own efforts to improve communication among the faculty and across the University and whose monthly emails reviewing Faculty Senate business are helpful to overcoming these problems, was an active participant in the committee meeting that reviewed the information from Eberly College faculty, as was Associate Provost Melissa Latimer. Further refining what information faculty want and how it can be communicated most effectively may be needed, but considerable energy is being put behind this effort from the faculty side, and hopefully this movement continues. Effective two-way communication is essential for a university that takes shared governance seriously.

- 8. The committee has monitored how the University's child care facility is performing, and how it functioned once the University closed campus in March 2020. While it has seemed to be the case that faculty satisfaction with its performance has increased in the last year or two, the period in March and April was met with much dissatisfaction. Given that the reasons for that are likely to extend into the start of the 2019-2020 academic year, the committee will surely focus on this matter again next year. Additionally, the committee asked the administration what it could do to expand the availability of University child care. While there was not an immediate short-term suggestion, Associate Provost Latimer discussed how the current leadership team expects to increasingly recruit older, non-traditional student going forward, and that such a focus will require increased accommodations for more child care, which should spill over into increased availability for the children of faculty. The implication seemed to be that further investments in this, for every campus, require relevant campus communities to increase demand and make a compelling case related to that demand.
- 9. The committee met with Cris DeBord about the processes by which deans are evaluated, the role of faculty members in those processes, and how faculty should be informed of the findings of those evaluations. It is already WVU policy that faculty in a college should receive an overview of the results of such an evaluation however, that policy has not been followed across the entire university. Unfortunately, it seems the university does not plan to share any broad-stroke overview of evaluations that were conducted recently if it has not already done so (for example, there seems to be no plan to share the results of the evaluation of the dean of WVU's largest college that was conducted last year). However, as

to going forward, the committee was told the plan is to follow existing policy and share results of these evaluations with employees in the colleges deans oversee. The committee was told that Chris Staples should be our point of contact on following up regarding this matter.

- 10. At the committee's final meeting (given the closure of campus due to the COVID-19 pandemic) on March 10<sup>th</sup>, 2020 the discussion centered on a review of the <u>Dependent Education Scholarship</u> (how widely it is being used, if it needs to be more prominently promoted), concerns relating to <u>parking</u> (how can parking availability be assured for those who pay to park in lots? should the parking committee meet more often? should the director of parking chair the parking committee? would it help putting signs up explicitly telling students not to park in certain places?), <u>how to protect at-risk faculty</u> if we are teaching face-to-face during a pandemic, and helping faculty understand how accreditation requirements play into the trade-offs that are dealt with when decisions are made about forms of instruction. This last point goes back to the need to better communicate to faculty the demands and constraints the University works under when setting the basic parameters of its functioning.
- 11. April's meeting, that was canceled due to the pandemic, was supposed to include a presentation from WVU's new ombudsperson, Jodi Goodman. Since the committee wanted an update on how her work was proceeding Committee Chair Crichlow had a lengthy conversation with her and conveyed the following points to the committee from talk.
  - 1. Since starting the position last October she's met with 32 people
  - 2. Topics she's discussed with people have included relationships with colleagues and Department Chairs; communication; both upward and downward working relationships (for example, with Department Chairs and with graduate students); both policies not being followed and gaps in policies
  - 3. She's met more with tenure-track faculty than not in fact mostly with tenured faculty
  - 4. She's observed a lot of fear or retaliation, perceptions of favoritism, and conflict-avoidance
  - 5. She's put in a good bit of time on getting up to speed/setting up the office developing the website, building a network, findings a mentor (hers is at Colorado)
  - 6. She'd like to do more outreach and trainings on conflict resolution
  - 7. She thinks things we could work toward to help defuse tensions include greater transparency and building just processes into behaviors
  - 8. She noted that WVU is behind many other schools in terms of the resources devoted to the Ombudsperson Office (many schools have a full-time person or multiple part-time people; she's officially one-quarter time, but has been doing much more work than that in the position, although much of that was focused on start-up activities.

The committee will presumably hear from the Ombudsperson in person at a meeting in the 2020-2021 academic year.

#### Moving Forward in 2020-2021

Given the breadth of the committee's charge, many matters that demand its attention will surely arise. However, the following matters it dealt with this year seem sure to require continued attention. First, the committee should continue to work and coordinate with other groups of faculty on campus such as the TAP/SAP task force and the Senate's Inclusion and Diversity Committee that we know will be working on matters relevant to our charge. Secondly, it is clear that in order to function effectively and for senators to understand the needs of their constituents the committee should continue to work to improve intra-University communication. Furthermore, every year the committee works to be a point of contact to improve the access to child care for faculty members. Given the pandemic, that may be even more challenging in 2020-2021, so the committee should continue to work vigorously in that regard. Fourth, the committee should follow through as is timely to ensure policies regarding the evaluations of senior administrators are followed. And when appropriate the committee should work with Staff Council for our mutual benefit and support and for the broader good of our community.

However, even with much unknown about the future of the pandemic and the University's future functioning in light of that enormous challenge, it is already abundantly clear that the committee should be active in 2020-2021 working on behalf of faculty in that context. This may include many matters but among them seem likely to be (the following are points that have already been raised in intra-faculty discussions):

- Faculty interests when it comes to furloughs and RIFs
- Compensating faculty for the extra work they are having to do (for example, creating multiple versions of a single class as the context of teaching changes)
- Challenging the "do more with less" dogma put forward by some managers, an
  ideological agenda that shows limited respect work the workforce and the challenges
  it faces
- Protecting the health and safety of faculty members, especially those who have health attributes that make them particularly at-risk
- Ensuring faculty members are part of important planning activities
- Protecting faculty members' ability to design and teach their courses without unreasonable administrative demands that do not respect faculty members' expertise
- The ability of faculty to travel to carry out research
- Whether or not adjustments in research expectations need to be made for faculty
  members whose research requires significant amounts of travel (adjustments to both
  annual evaluations and promotion expectations).

#### General Education Foundations Committee (GEFCo) 2020 Annual Status Report

#### **Committee Members**

Lesley Cottrell, Medicine, Chair

Lisa Di Bartolomeo, Eberly, Chair-Elect

Mary Beth Angeline, Eberly

Robert Brock, School of Medicine, Past Chair

Lynne Cossman, Eberly

Zachary Freedman, Davis

Leslie Graebe, CEHS

Crosby Hipes, WVUIT

Suzanne Kitchen, B&E

Jennifer Merrifield, Potomac State

Beth Nardella, Medicine

Kristina Olson, College of Creative Arts

Nathalie Singh-Corcoran, Eberly

David Hauser, Faculty Secretary, ex officio, Eberly College

Louis Slimak, ex officio, Assistant Provost

Misti Woldemikael, ex oficio, Associate Registrar for Academic Services

Tracey Beckley, TLC Representative

Robynn Shannon, TLC Representative

Madison Matheny, Student representative

#### **Committee Charge**

The General Education Foundations Committee (GEFCO) will:

- 1. Review applications for new GEF courses and existing GEF courses.
- 2. Produce resources and educational opportunities to support the GEF and institutions to develop appropriate WVU Learning Goals.
- 3. Collaborate with other committees and any relevant administrative bodies on Outcomes Assessment of the GEF and other relevant assessment issues.
- 4. Address in a timely fashion any other issues pertinent to the success of the GEF.
- Collect course-level assessment of the GEF as part of the application and review process.
- 6. Evaluate periodically national trends in general education and best practices, and implement changes as needed.

#### Summary

 The GEFCo continued to review courses submitted for consideration within the GEF catalog of courses and structure.

- The committee continued to review the general education structure at the request of the Provost's Office to confirm particular areas that would fall within the general education program.
  - Guest members who were involved in the general education process across various divisions within the University were also invited to engage in discussions about the general education program.
- A draft of the general areas was shared with the Provost's office for input with planning focused on structure (e.g., size, course determinations) and assessment in the next segment.
- Committee recommended members who would serve on the university general education task force. This task force was proposed by the Provost's Office to identify any changes needed within the general education program in response to Title IV.
- Committee continued to work with Louis Slimak to identify assessment models that would be used to evaluate the current GEF courses.

#### **Future Work**

Work closely with the general education task force in their review and evaluation
of the general education offerings. Specifically, the GEFCo will provide work they
have gathered on evidence-based general education approaches across
institutions, assess current general education and provide feedback based on
what works/what doesn't, and conduct needs assessment of proposed activities
in terms of available resources and challenges.

The GEFCO would like to acknowledge and thank Judy Hamilton for her institutional memory and on-going support of the committee. Without her, it would be impossible to accomplish as much as we do.

# INCLUSION AND DIVERSITY FACULTY SENATE COMMITTEE 2019-2020 ANNUAL REPORT

MAY 8, 2020

Lauri Andress Chair

#### **Committee Members**

Lauri Andress, School of Public Health, Chair
Keri Valentine, College of Education and Human Services (CEHS), Chair-Elect
Anna Allen, School of Public Health
Jessica Bishop, College of Creative Arts
Scott Crichlow, Eberly College
Cerasela Zoica Dinu, Statler College
Tiffany Mitchell Patterson, CEHS
Ellen Rodrigues, LGBTQ+ Center
Denis Scott, Extension Service
Christina Wilson, School of Medicine
Erin Kelley, TLC Representative
J. Carr, Ph.D. ex officio, NAACP
J. Spenser Dardan, ex officio, student representative

# **Committee Charge**

- 1. Assess and issue a university wide report on the campus culture of inclusion, equity, and diversity to be carried out according to best practices but not less than every five years;
- 2. Provide material, curricular support, and guidance, including an online toolkit for faculty teaching and service related to diversity, equity, and inclusion (DEI);
- 3. Establish and hold ongoing conversations with key units and stakeholders at West Virginia University including but not limited to the Division of Diversity, Equity, and Inclusion, the office of Equal Opportunity and Affirmative Action, the Center for Excellence in Disabilities, the Center for Black Culture and Research, the ADVANCE program, the LGBTQ+ Center, the Office of Multicultural Affairs and external community leaders and stakeholder groups that work to further social justice and inclusion in West Virginia;
- 4. Evaluate periodically national trends and report on best practices related to diversity and inclusion, and make recommendations to appropriate University bodies including the Office of the Provost, the Teaching and Learning Commons, and other Centers, Colleges, Schools and programs affiliated with the University;
- 5. Report on systems and mechanism that provide support to faculty who engage in research and scholarship on issues related to social status including but not limited to race, ethnicity, income, gender, sexuality, and religion;
- Address in a timely fashion other issues pertinent to the charge of the committee.

#### Introduction

As a new entity, the **Committee on Inclusion and Diversity** began meeting on August 23, 2019 and convened monthly to consider how to build an agenda around the charge of the Committee. We start this report with a list of achievements followed by initiatives that were attempted. Next, we outline ideas for future Committee activities. A more thorough description of the Committee's achievements and other agenda items is then presented. We include: best practices for climate assessments; the data analysis conducted on trends in faculty appointments and hiring at West Virginia University; and a summary of the reading and lecture series on Inclusion. In closing, a listing of the highlights from each Committee meeting is presented.

#### **Achievements**

Details on each of these activities is presented below.

- Created a set of principles around best practices on campus climate assessments.
- Piloted a reading and lecture series on issues of inclusion and diversity.
- Received an analysis of data detailing trends in racial, ethnic, and gender diversity in undergraduate students and instructional staff with faculty status at WVU; and
- Piloted collaborative work across Senate Committees by meeting with two Committees
  (Teaching and Assessment Committee (TACO) and Faculty Welfare) to advance several
  ideas including recommendations on contra-power, a classroom assessment summit,
  and Social Equity Teams.

#### **Actions and Ideas Attempted**

- Rapid Response Protocol
- Social Equity Teams
- Recommendations on Contra-Power

#### **Future Committee Activities and Goals**

In discussions and a survey conducted among Committee members, the following ideas and questions emerged:

- Use the data shared in this report to work with a more visible entity (ex. Center for Resilient Communities) to consider how we might build deliberative action towards greater inclusion and diversity.
- Enhance specific efforts to support underrepresented faculty and train/mentor Department chairs/deans about diversity issues.
- Continue to work towards finding a place within the WVU structures for the Committee (more than interaction through the Faculty Senate meetings). The idea is to participate in discussions before they are made. Determine mechanisms through which this committee

- could collaborate with the University leadership before policies and decisions are presented in their final form at the Faculty Senate meetings.
- Discuss the tension between whether the Committee exist to make groups feel welcome
  or whether the Committee should be a watchdog or advocate/activist group that works
  towards building the system, mechanisms, and policies to ensure that groups feel
  welcome and able to succeed. Could the Committee do both?
- Create a sense of community in Morgantown, making faculty and staff feel safe, respected, and understood, and ensure proper policies are in place to support diversity, equity and inclusion (DEI).
- Create a ground swell among faculty to help them understand the benefits of using resources towards these efforts (i.e., inclusion, diversity), to better understand policies/actions etc. that act to counter diversity and inclusion.
- Engage more faculty in social justice efforts to truly "Go First" as a university in order to be a leader in these efforts. It means we cannot rely solely on administration to do something. Try to heighten faculty engagement in ways that raise critical consciousness (notion is meant to reflect Freire, father of community organizing in the slums of Brazil).
- Be faculty leaders for our respective colleges to link others to the Committee charge that
  calls for us to "Provide material, curricular support, and guidance, including an online
  toolkit, for faculty teaching and service related to diversity, equity, and inclusion."
- Establish a Provost Fellow to work within the Provost office.

#### **Detailed Description: Activities Pursued**

Refining and building Committee consensus around the ideas and activities that we pursued were discussed and considered at our November 15th meeting. It was here that we agreed as a committee to focus on the short-term recommendations to create a reading and lecture series and recommended a campus climate assessment on inclusion in order to establish a baseline on inclusion and diversity at the University and set up a way to begin a conversation around DEI. We also decided on long-term goals including: a classroom assessment summit supported by the TACO and Faculty Welfare Committees. The last two activities (classroom assessment workshop and campus climate assessment) were eventually taken up by the Associate Provosts for Faculty Development and Culture and Academic Personnel.

Our Committee discussed: establishing Social Equity Teams (SET); establishing a Rapid Response Protocol; advocating for recommendations on Contra-Power working with the WVU Council for Women's Concerns (Campus Climate and Women of Color Committees); developing resources for inclusive teaching in collaboration with the Teaching and Learning Commons (TLC); creating a diversity resources website (work taken on by Meshea Poore, VP Office of DEI); launching an audit and visualization tool to display DEI activities at the University;

creation of a highly promoted diversity calendar; and establishing an award for courses that showcase diversity and inclusion (perhaps request partnership with the Provost's office).

### **Best Practices on Campus Climate Assessments**

After reviewing literature, we came up with the following points to serve as guidance in establishing a campus wide DEI climate assessment.

#### **KEY POINTS:**

- University should express a specific narrative that links the notion of "climate" to inclusion and diversity.
- Leadership should establish a transparent mechanism that facilitates a visible two-way dialogue between underrepresented, diverse groups and the University leadership.
- Evaluate and acknowledge the experiences of underrepresented groups and identify circumstances and challenges that could make that experience different from the majority.
- Recognize that diversity is a numerical representation of underrepresented groups, while inclusion is the sense of being welcomed or not being excluded.

### Specifically:

- Research demonstrates that efforts to address inclusion and diversity are successful to
  the extent that they account for relations between the leadership and social identity
  groups including issues of trust, accountability, obligations, transparency, and
  perceptions of the university's commitment to stated diversity goals. Results indicate that
  transparency and trust are important to building and maintaining the perception that the
  university is committed to its stated diversity goals.[1]
- 2. In addition to attending to structural diversity, i.e., counting numbers of diverse faculty/students/staff, a best practice is to monitor and aim to improve the psychological climate on campus. This dimension of climate is meant to capture the extent to which individuals perceive racial conflict and/or discrimination on campus (Hurtado, 1992), feel somehow singled-out because of their background (Nora & Cabrera, 1996), or perceive institutional support.
- 3. The changing composition of college staff/faculty/ students in terms of race, ethnicity, religion, sexual orientation, and gender while positive should not be the only measure of progress when, in fact, little has been done to measure, assess or discern the culture and climate of the institution as perceived by non-majority social identity groups.
- 4. Inclusion and diversity efforts should acknowledge that faculty/staff/students of different identities have more observed and direct encounters with exclusion, discrimination and/or racism than their White peers, and therefore, perceive their campuses as more hostile and discriminatory. To point to outcomes that indicate no discrimination, collegiality, and a sense of inclusion while most of the respondents are White is inconsistent with the data and lacks credibility.
- 5. A commitment to diversity and inclusion should use practices and survey instruments that incorporate the wide variety of social identity groups on a diverse campus.
- 6. Assessments of faculty should identify and account for aspects of the institutional environment that may explain varied faculty classroom outcomes associated with

- diversity issues and ongoing, unacknowledged stigmatization, discrimination, and inequities in academia.
- 7. Perceptions of leadership and staff in positions that control hiring can make a difference in the implementation of efforts to recruit and retain different identity groups. Accordingly, assessments of climate should examine perceptions of priorities and intent on the part of leadership and staff to recruit greater numbers of social identity groups. These perceptions can be compared with or triangulated with actual structural changes including the implementation of plans and programs.
- 8. Any efforts to assess climate on diversity, equity, and inclusion should prepare the campus staff, students, and faculty for involvement in the process because it promotes consensus building and engenders a sense of ownership in current and future plans.[2]
- 9. Efforts to assess climate on diversity equity and inclusion (DEI) should result in a transparent, widely shared report that facilitates future planning and discussions that are built around a two-way dialogue between leadership and underrepresented groups.
- 10. To ensure trust and objectivity during a campus-wide climate assessment on inclusion and diversity, ideally a team of facilitators from outside the institution should conduct the groups and develop a report that is shared with the campus constituents. Should funding be an issue, having something like a Social Equity Team (SET) that oversees any campus climate assessment on inclusion and diversity can help to ensure that notions of trust, transparency, objectivity, and accountability are woven throughout the process.
- 11. The SET provides a greater sense of trust in the neutrality of the effort by actually and literally separating the self-interest of the University from the evaluation and assessment process. The most successful teams are comprised of salient social identity groups including student, faculty representing various ranks and disciplines, and staff representing various grades and positions (e.g., clerical, housing and food service, physical plant).[3]
- 12. It is imperative that the entire process of the campus climate assessment be transparent. It has been found that failure to promote transparency and equitable sharing of the effort as articulated and supported by the campus leadership can make the difference in the success and failure of the effort.
- [1] Pepper, M. B., Tredennick, L., & Reyes, R. F. (2010). Transparency and trust as antecedents to perceptions of commitment to stated diversity goals. Journal of Diversity in Higher Education, 3(3), 153.
- [2] Rankin, S., & Reason, R. (2008). Transformational Tapestry Model: A comprehensive approach to transforming campus climate. Journal of Diversity in Higher Education, 1(4), 262.
- [3] Rankin, S., & Reason, R. (2008). Transformational Tapestry Model: A comprehensive approach to transforming campus climate. Journal of Diversity in Higher Education, 1(4), 262.

## **Summary: Inclusion and Diversity Data Analysis**

A full set of tables and graphs may be found in an addendum. This analysis examined current trends in racial, ethnic, and gender diversity in undergraduate students and instructional staff with faculty status at WVU using the Integrated Postsecondary Education Data System

(IPEDS), a comprehensive system of interrelated surveys conducted annually by the National Center for Education Statistics, a part of the Institute for Education Sciences within the United States Department of Education. We compared the available data at our institution with Big 12 institutions namely Baylor University, Iowa State University, Kansas State University, Oklahoma State University-Main Campus, Texas Christian University, Texas Tech University, The University of Texas at Austin, University of Kansas, and University of Oklahoma-Norman Campus) as well as several R1 land grant and aspirational institutions, like University of Delaware, University of Massachusetts-Amherst, Colorado State University-Fort Collins, Washington State University, Ohio State University-Main Campus, University of Missouri-Columbia, Oregon State University, University of Arizona, Clemson University and University of California-Berkeley and others.

#### <u>Findings</u>

No compared universities/colleges have achieved a faculty racial distribution that is comparable to the US population.

Looking at the faculty distribution by racial identification in comparison to national data, underrepresented populations at WVU are Black/African American, Hispanic/Latinx, Native American, Hawaiian/Pacific Islander and multiple identifiers.

In comparison to state data, underrepresented populations are Black/African American, Native Americans and multiple racial/ethnic identifiers.

The WVU undergraduate student/ state population ratios are comparable to or better than state population estimates.

Minority faculty distribution is not equivalent to the student distribution for Black and Hispanic populations.

In 2013-2014 WVU had approximately 5% tenure track faculty that identified as African American/Black. In 2018 -2019 that percentage has decreased to 3.6%.

Questions raised by the data analysis:

- Is the pipeline of tenure eligible women and minorities drying up or are tenure track women and minorities leaving before tenure?
- Is the demand for tenured professors decreasing in WV or is there a problem with grant funding for women, minority faculty?
- Are the recruitment and tenure efforts attuned to consider women and minorities?

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### **Pilot Reading & Lecture Series**

The reading and lecture series sought to provide an opportunity for WVU to examine issues related to diversity and inclusion at the college/unit level. The reading and lecture series was open to anyone at WVU and in the community, however, we did prioritize faculty as the primary audience for these efforts. The Spring 2020 pilot started with a focus on two short readings: "From Affirmative Action to Diversity: Toward a Critical Diversity Perspective" by Herring (2011) and "Why Diversity Initiatives Fail: Symbolic Gestures and Millions of Dollars Can't Overcome Apathy" by Newkirk (2019).

The College of Education and Human Services (CEHS) was the first college to participate in the pilot initiative and shared the following report with the ID committee to inform the planning of future diversity programming and offer a way to foster open dialogue about these critical issues.

- Faculty and staff from the College of Education and Human Services (CEHS) met twice during the Spring 2020 semester (March 6 and May 1) as part of the inclusion and diversity pilot reading initiative. The first meeting was face-to-face while the second meeting took place via Zoom. Turnout for the Zoom meeting far exceeded that of the face-to-face meeting and participants recommended this mode for future gatherings. The two readings discussed included Newkirk's (2019) article, "Why Diversity Initiative Fail" and an article from Herring and Henderson (2011) titled, "From Affirmative Action to Diversity: Toward a Critical Diversity Perspective." While the articles guided prompts for discussion during the meetings, time during the pilot was spent primarily getting to know each other and sharing current perspectives and experiences related to inclusion and diversity in the college and broader university. The group also collaborated to suggest possible actions we would like to take as a college.
- While CEHS is just beginning a college-wide conversation, we are aware that other colleges and units are engaged in similar work. For the purposes of this Faculty Senate report, we have a few key take-aways from this pilot initiative. Faculty and staff acknowledged that conversations with colleagues across the college are rare, while acknowledging both the importance and difficulty. Understandings of diversity varied; at the same time, the group expressed that not all differences are given similar challenges and opportunities. The group also expressed the desire for WVU to be clear about what we mean by diversity in order to hold ourselves and our institution accountable. There was also recognition that everyone is responsible and needs to do something to address inequity and exclusion. Sometimes this is not as visible (e.g., who is running our programs, who is serving in leadership positions, who is receiving tenure and promotion).

- When discussing actionable next steps for departments and the college, we discussed possibilities for creating a more diverse applicant pool, such as working with chairs, deans, and search committees to write ads that include diversity and engaging in training before conducting a search. However, we need to be honest about where we are and do the critical work before attempting to attract diverse candidates. What we say we are doing in our ads must be true.
- There was an expressed interest in continuing to work together as a college to better understand diversity, inclusion, and equity through shared readings and broader workshops and courses across campus.

Campus-wide efforts are planned to begin in Fall 2020. We will select a book for the 2020-2021 academic year and invite at least two speakers that have studied issues around inclusion and diversity of marginalized groups in the United States.

#### **Faculty Classroom Assessment Summit**

The Faculty Classroom Assessment was a joint initiative of the Senate Faculty Committees on Inclusion, Faculty Welfare, and TACO. Discussions among the Committee Chairs demonstrated an interest in alternative ways to evaluate teaching effectiveness alongside the traditional use of student evaluation data to secure outcomes on teaching effectiveness. In the end the coordination of this idea was left with planning and coordination coming from the Teaching & Learning Commons and the Office of the Associate Provosts for Academic Personnel and Faculty Development and Culture.

#### Social Equity Teams (SET)

This initiative was proposed as a mechanism by which to bridge communication between the WVU leadership and underrepresented groups across students, staff, and faculty. The vision was for the establishment of a social equity team (SET) to provide a greater sense of trust in the neutrality of climate assessment efforts by separating the self-interest of the University from the evaluation and assessment process. Social equity teams create a way for underrepresented groups to meet with leadership regularly to consider accountability and to give underrepresented groups visibility, voice, and recognition. The Faculty Welfare Committee voted to support the social equity team. In the end, considerations for the idea ended with presenting details on how the SET would work and include interaction beyond two town hall meetings/year; and considering of where in the system the SET should be located to maintain independence. One idea was to hold a smaller set of meetings to refine issues and plan. In attendance would be the leadership of the SET and University. We were also considering how to determine who could put representatives on the team. Discussion ended working in collaboration with the Faculty Welfare Committee to move this work forward.

#### Recommendation on Contra-power, i.e., student-on-faculty harassment

These recommendations on Contra-power were advanced by the WVU Council for Women's Concerns (Campus Climate and Women of Color Committees) and discussed in collaboration with the Senate Faculty Welfare and TACO Committees. At the close of our year we hoped that this initiative would find a home as part of the Social Equity Teams.

Contra-power harassment refers to a situation in which an individual with lesser power within an institution harasses an individual with greater power (Lampman, Phelps, Bancroft, & Beneke, 2008).

- 1. Strengthen and clarify steps taken to address harassment and bullying. Ask the university to recognize contra-power harassment. Determine who or what unit has a remit that allows them to explore these recommendations. When there is a pattern of behavior the people experiencing the bullying/harassment should all be engaged. These incidents and how they are handled are currently very siloed and treated as "one-off" scenarios. Consider how we can work as a team to coordinate experiences and reports so that faculty can be aware of patterns of behavior or repeat offenders.
- 2. Increase transparency about how student conduct and CARE issues are handled- this does not mean HIPAA violations. For example, after a complaint is made is it possible for the faculty member to receive a notice and updates? Alternatively, is it possible for involved parties to understand what measures are being taken?
- 3. Implement training(s) for students that cover civility, SEIs, behavior and expectations when entering the university as a freshman or transfer student- including non-traditional students.
- 4. Implement training for faculty and staff on university policies, procedures, the CARE program/office, and student conduct. We have found that many faculty do not know about CARE or its function.
- 5. Implement training for "leaders" on topics such as harassment, student incivility, SEIs, how to respond when a faculty member does not feel safe at work, diversity and inclusion training.
- 6. Conduct a survey or focus groups with faculty (perhaps as part of a climate assessment) to learn about and document the incidence of harassment from students. As we have tried to emphasize, faculty need to feel heard.
- 7. Develop a policy to address what to do when students create false reports against faculty.

#### Rapid Response Protocol

At the start of our meetings the Committee felt that it was important to have a mechanism by which to comment on discriminatory events that might occur in real-time. We noticed that often the University does not issue a statement about these events if it can be avoided. We had internal discussions about what this mechanism might look like and different systems that could be used including social media. One external discussion with the leadership of the Faculty Senate ended with a stalemate over legal issues and the need for guidance on University level communications protocol.

#### **Description of Committee Meetings**

#### August 23, 2019:

First meeting and introduction of members. Discussion on mission and goals.

#### September 20, 2019:

Presentation: Robynn K. Shannon, RPCV, Ph.D., Assistant Director, WVU Teaching & Learning Commons

After volunteering to analyze data, Robynn Shannon presented an analysis on the hiring, retention, and promotion trends in minority faculty at WVU in comparison to other R1 and land grant institutions. We eventually secured a similar analysis for undergraduate enrollment minority students at WVU. Results are presented below.

#### October 18, 2019

Presentation: Jay Spenser Darden, Director, Diversity Initiatives and Community Engagement, Division of Diversity, Equity and Inclusion

#### November 15, 2019

Guest: Melanie Page, Associate VP for Creative and Scholarly Activities

At this meeting, the committee decided to pursue two short-term recommendations as well as several long-term recommendations. The short-term recommendations included a reading and lecture series on race/ethnicity and religion at WVU and a campus climate assessment on inclusion. Long-term recommendations included an assessment summit in collaboration with TACO and the Faculty Welfare Committee.

#### November 21, 2019

Discussion on pilot ideas with Associate Provosts Latimer and Neidermeyer

#### **December 6, 2019**

Presentation on Contra Power: Council for Women's Concerns, Stefanie Hines

#### January 24, 2020

Guest: Meshea Poore, VP Office of DEI

#### February 21, 2020

Guest: Paul Kreider, Vice Provost

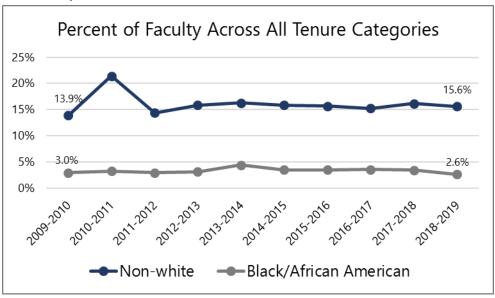
#### **April 17, 2020**

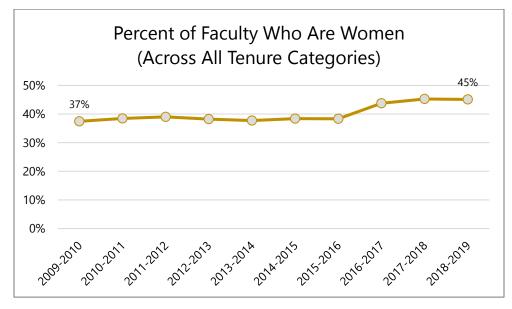
Virtual Meeting: Refine Committee's Final Report

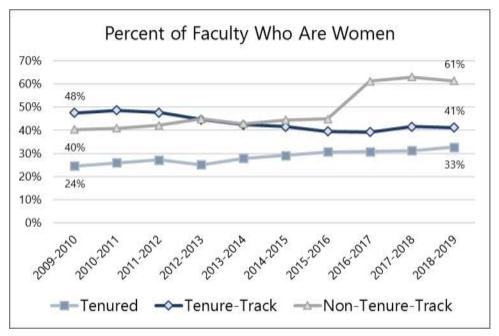
# Interim Report

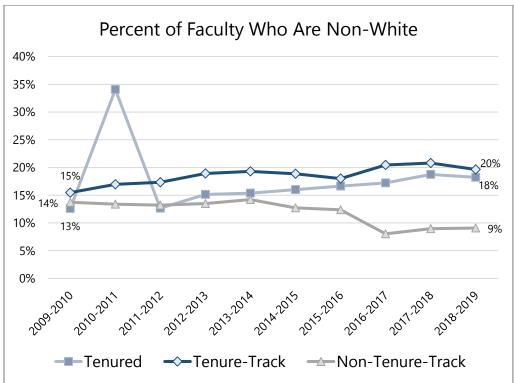
## WVU Faculty Senate Committee: Inclusion & Diversity

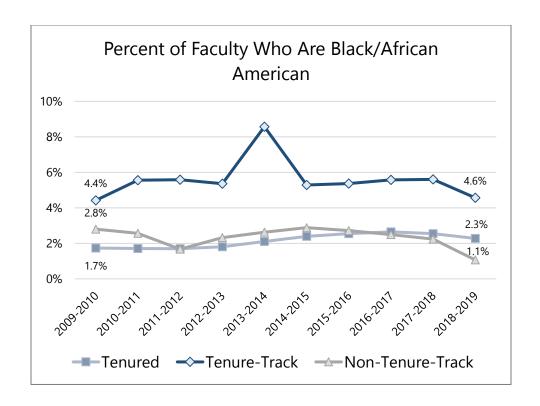
# **Faculty**

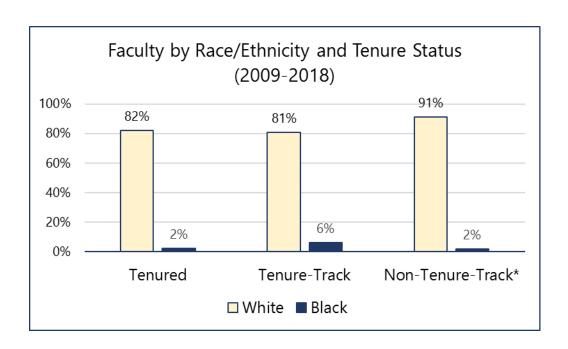


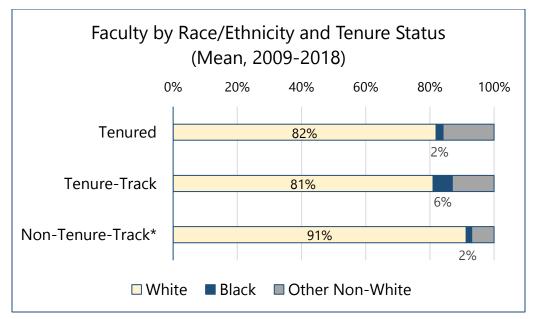


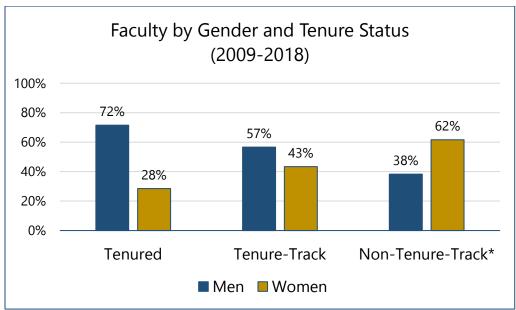


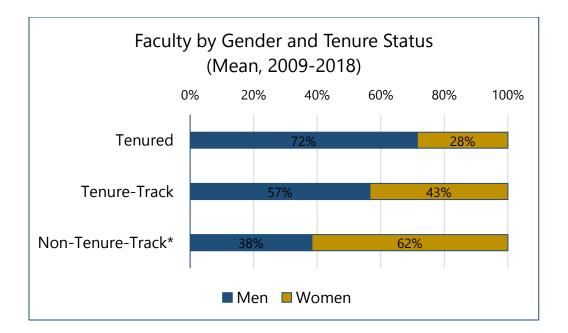




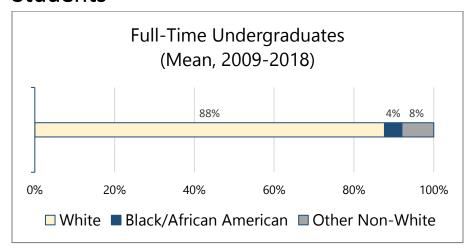


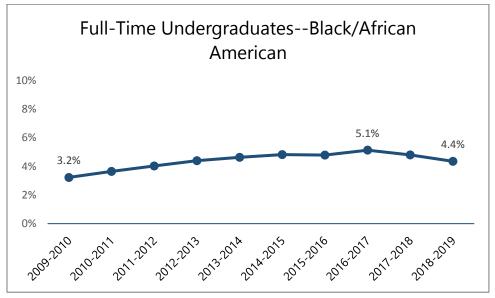


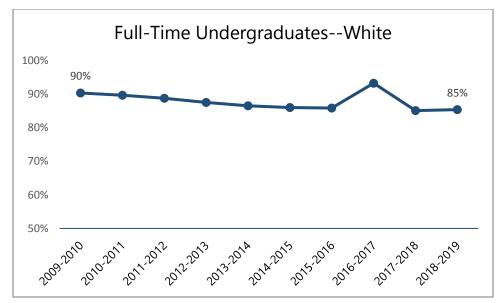


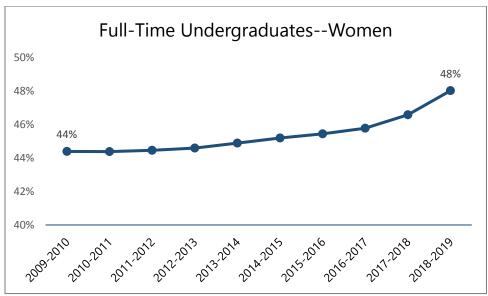


# Students

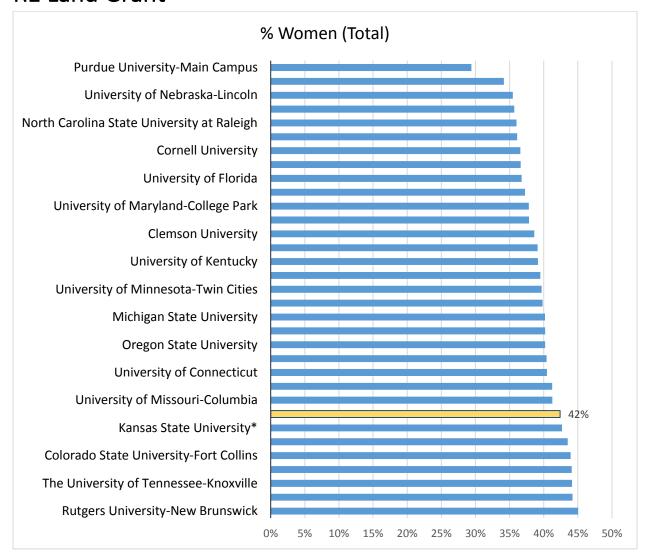


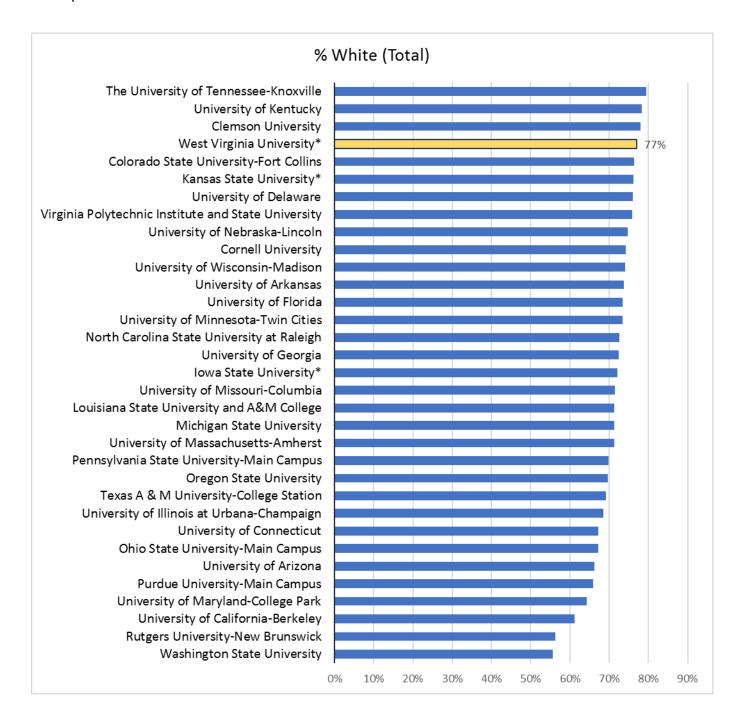


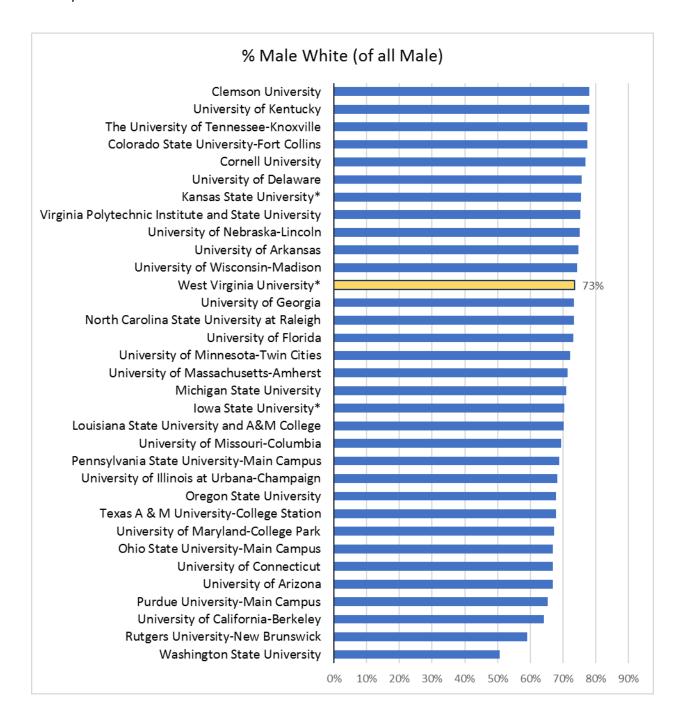


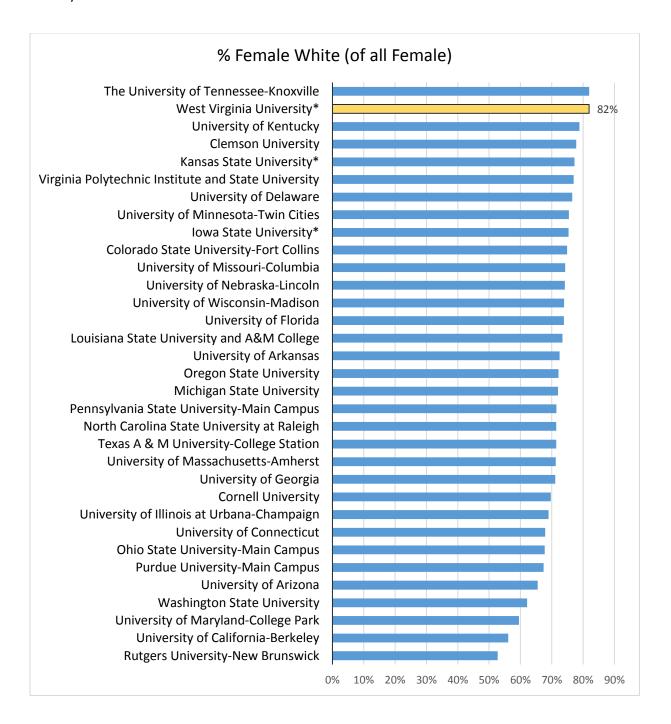


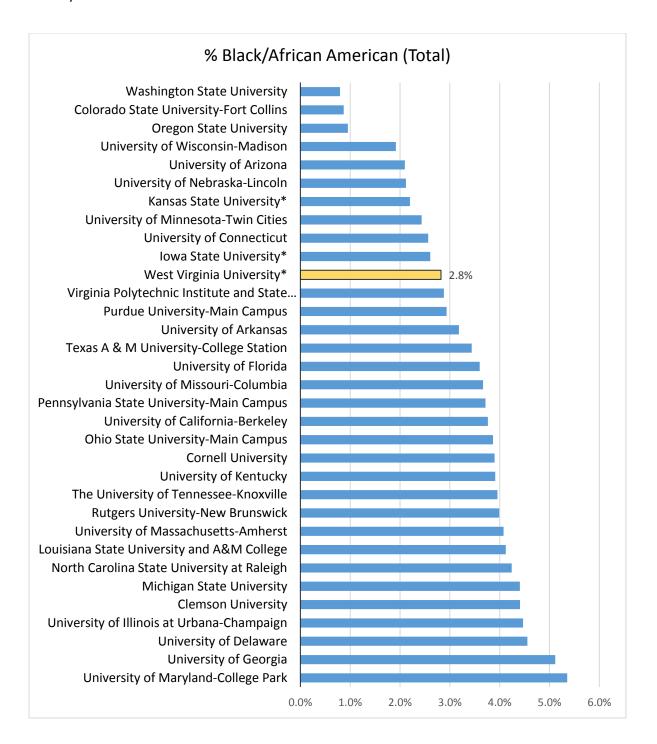
## **R1 Land Grant**



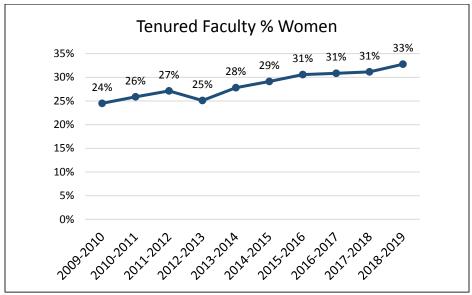


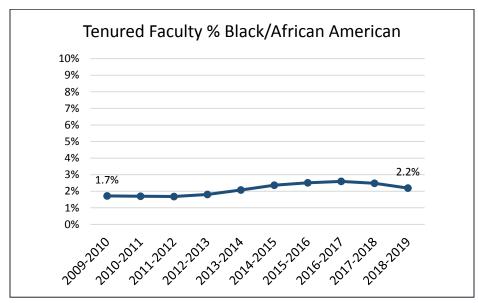


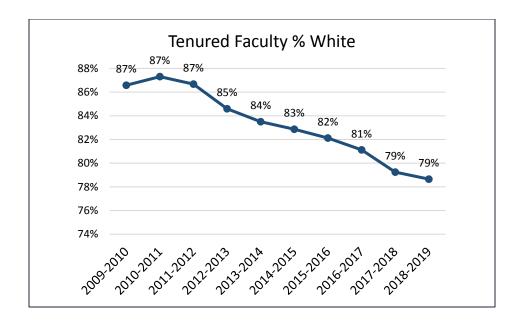


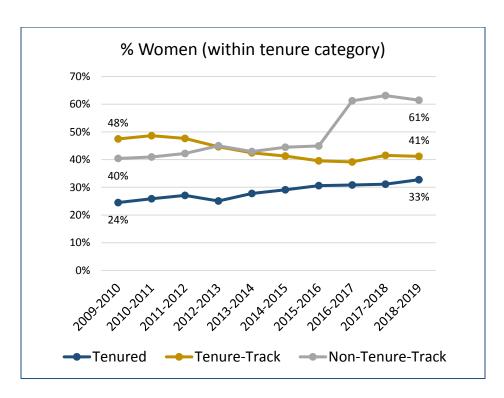


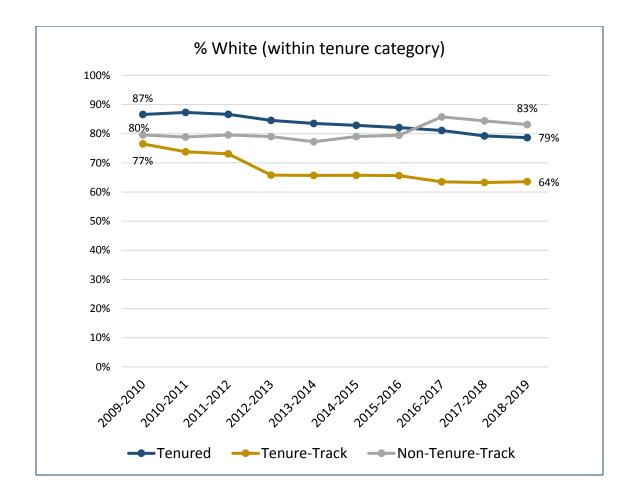
# WVU Longitudinal

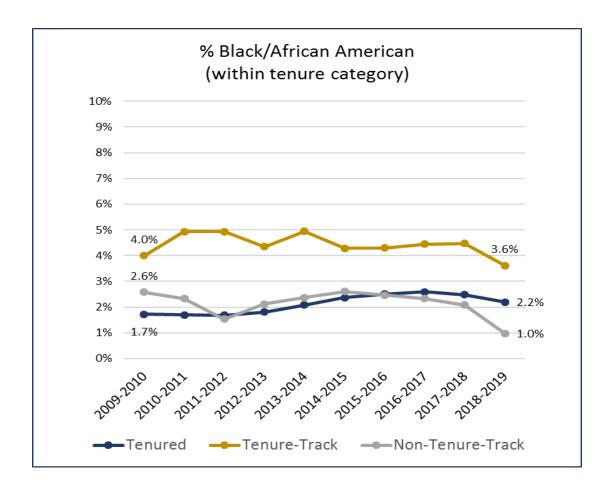




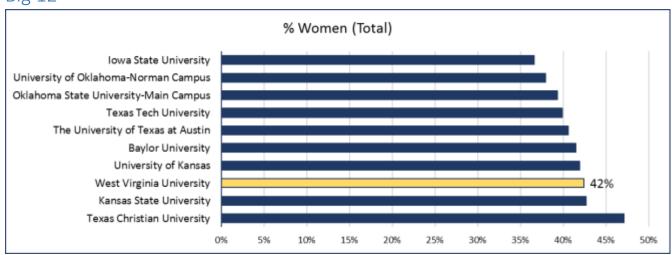


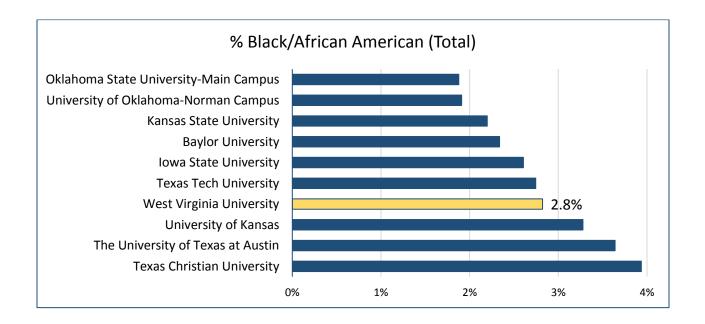


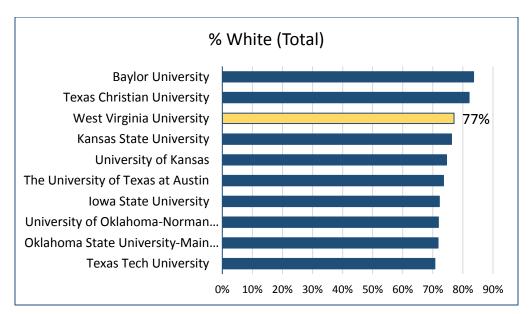


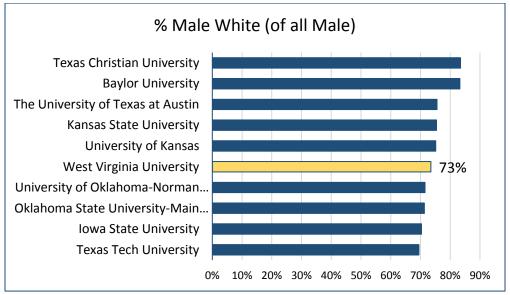


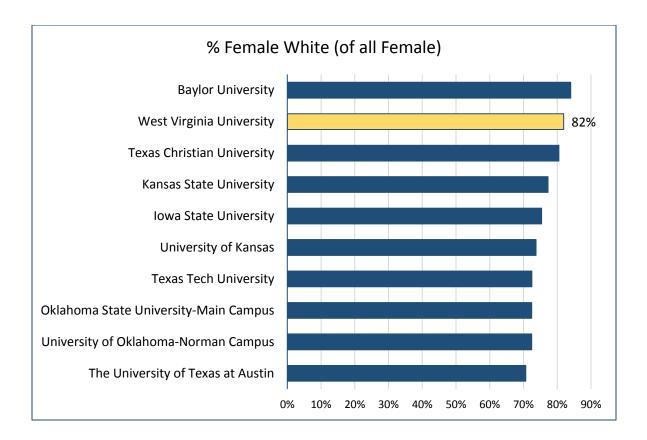
Big 12



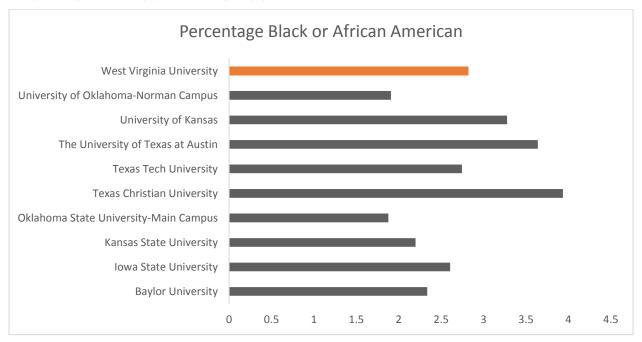


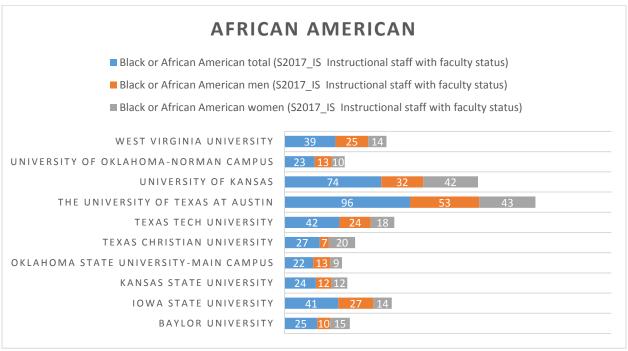


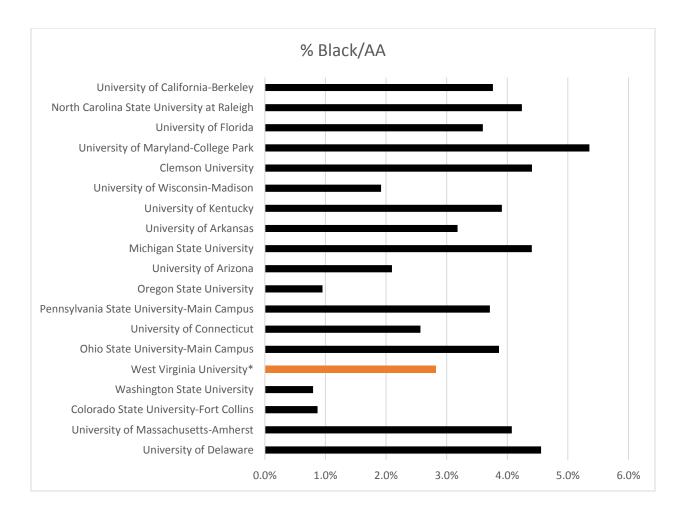




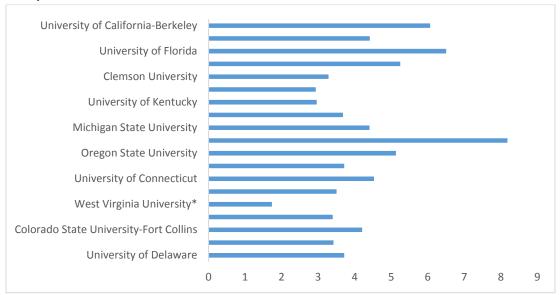
### Black or African American

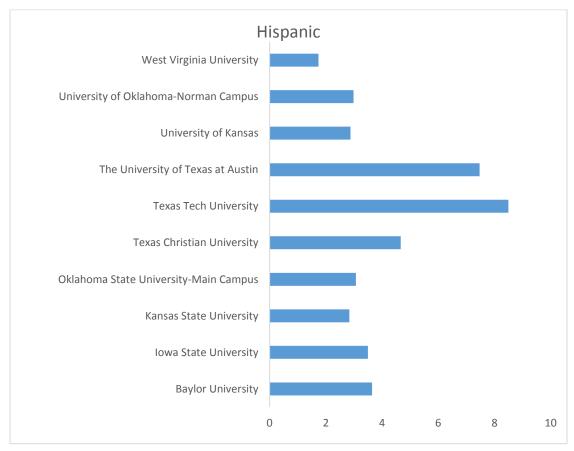


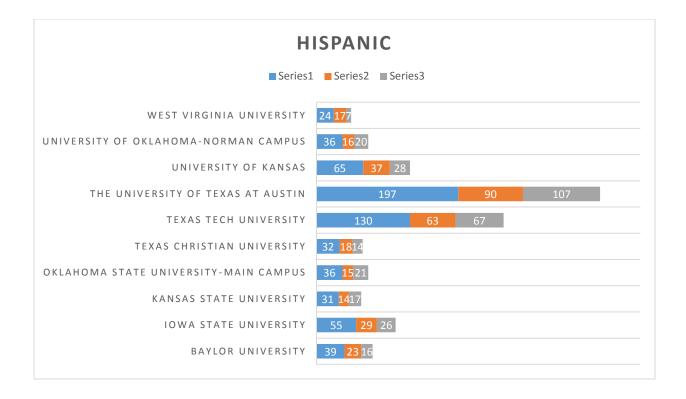




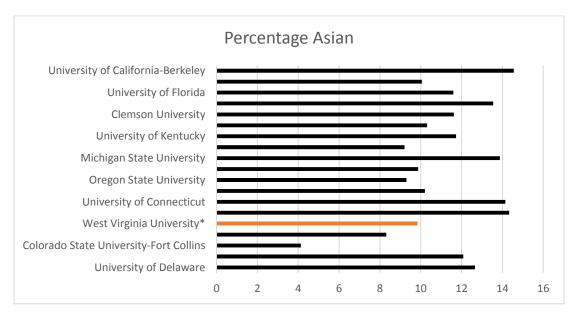
# Hispanic

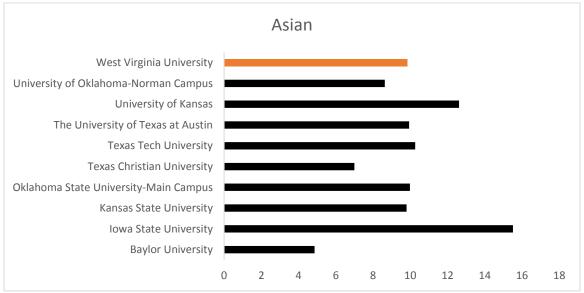


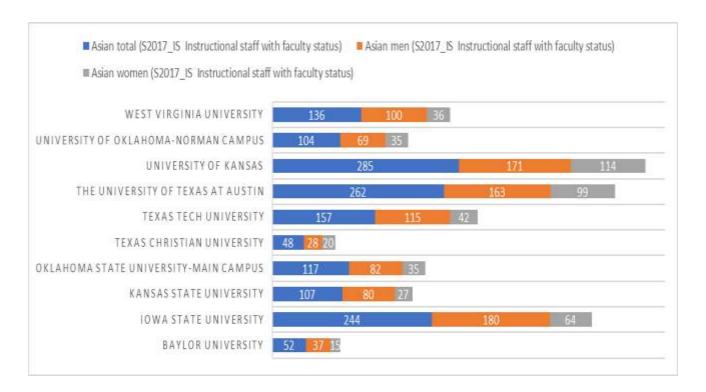




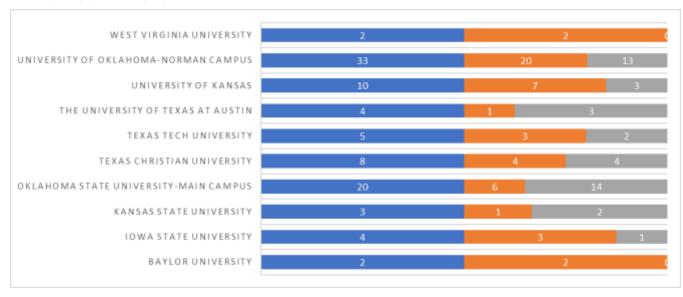
## **Asian**

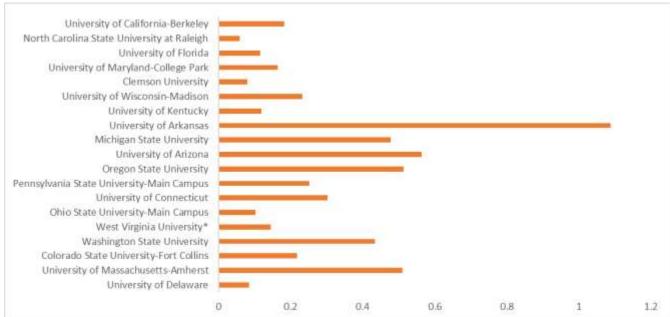




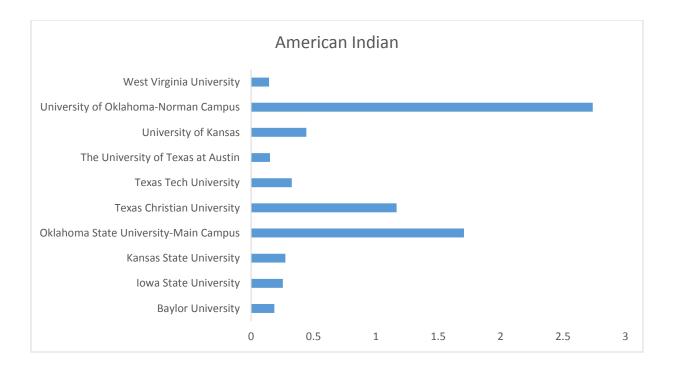


## American Indian





#### January 2020



#### WVU Faculty Senate Library Committee Annual Report 2019-2020

**Committee Charge:** The Library Committee has advisory responsibility for the formulation of Library policies and procedures in circulation, collection development, instructional services, research services, funding, and keeps the University Senate informed regarding current library issues and concerns.

## Goals for 2019-2020 from the previous year's committee were:

- Increased involvement of WVU Faculty Senate in supporting WVU Libraries movements into open access materials and publishing.
- Increased faculty involvement with WVU's research repository.
- Improved communications between faculty and library with respect to journal subscriptions and other library resources, perhaps with more communication through library liaisons.

#### Fall 2019:

(Committee Meeting 10/18/2020) Thirteen committee members and invited guests were present in person at the Downtown Library or by phone. The committee charge, goals, introductions, and discussion of invited WVU Libraries participants' work was covered. Priority agenda items centered on offering feedback on the some of the larger philosophical questions issues facing the library. After 3 previous years of budget cuts, faculty were interested in how selection for cuts were being made to journal subscriptions. Since the library is working with bundled packages, a challenge is hearing from individual faculty on title by title selection cuts versus a big picture view to systematically analyze which items should or should not be cut. Committee members gave advice and assistance for a hands on activity to gather input from the Senate during the November meeting. The committee members gave feedback and worked through the following topics. Topic 1: Journal Selection Criteria. Topic 2: Transformative Agreements. Topic 3: Sharing Scholarship Openly.

(Faculty Senate Activity 11/11/2019) This activity was an opportunity for WVU Libraries to gather information about faculty attitudes and priorities regarding the Libraries' scholarly communication challenges. One of the goals of this activity was to start campus conversations about collection development and scholarly communication at a conceptual level in order to inform decision making processes. WVUL Dean, Karen Diaz, gave a brief introduction, then the members of faculty senate had the opportunity to participate in an activity mapped to one of three discussion topics: Journal Selection Criteria, Library Contracts, and Sharing Scholarship Openly. (See attachment for summary report).

## **Spring 2020:**

(Committee Meeting 3/4/2020). Nine committee members and invited guests were present in person at the Evansdale Library or by phone. Agenda items discussed included a proposal for an Advisory Board that is being considered by Libraries, the criteria Libraries uses for selecting journal subscriptions, and methods for communicating Libraries' information out to the campus community. Dean Karen Diaz shared details from the Faculty Senate Working Group Summary. Key findings from the summary include: Firstly, we found commonalities between the ways in

which Faculty Senate and the Libraries rank journals for purchase. Secondly, faculty are interested in having wider conversations about publishing practices as related to tenure and promotion. Thirdly, the Libraries must do more advocacy and engagement about topics such as open access and library contracts with the larger campus community. (See attachment for summary report).

From the year's meetings and workgroup feedback, we would suggest building on the current goals in the coming year in order to continue an increase in communication involving journal and resource selection as well as faculty understanding of open access materials involvement and WVU's research repository.

Working Group Summary: Libraries present Faculty Senate with Three Large Collections Issues

/ Spring 2020



# **Executive Summary**

On November 8, 2019, the Libraries had 30 minutes to engage with members of the Faculty Senate around three major decision points we find ourselves in the midst of with regard to providing access to scholarly content for the campus. The three issues included journal criteria, library contracts, and open access publishing. While these three topics are distinct, they often become intermingled in our decision-making processes.

The primary goal of the exercise was to introduce new conversations regarding what type of input the library needs from faculty in shaping the collections. A secondary goal was to get preliminary feedback to help us determine how to move forward with faculty input on our work.

Firstly, we found commonalities between the ways in which Faculty Senate and the Libraries rank journals for purchase. Secondly, faculty are interested in having wider conversations about publishing practices as related to tenure and promotion. Thirdly, the Libraries must do more advocacy and engagement about topics such as open access and library contracts with the larger campus community.

# **Contact**

For more information about this summary or if your academic unit is holding conversations about these topics, please contact:

Karen Diaz, Dean of the Libraries Karen.Diaz@mail.wvu.edu.

# **COLLECTIONS ISSUE 1**

# How do we determine the criteria by which we prioritize journal purchases?

Due to steep increases in the costs of journal subscriptions and reductions in the libraries' materials budget, the library cannot subscribe to everything that scholars request. We can almost always get access to materials as requested, but how do we prioritize what we purchase?

The Libraries' Collections Advisory Committee (CAC) is an internal committee which advises the Libraries on resource allocations based on analyses of the materials budget and/or academic needs. CAC ranked an original list of 16 criteria. We asked participants at Faculty Senate to rank 13 criteria, which were refined for the time-limited nature of the working group exercise.

Faculty Senate	Collections Advisory Committee
Usage	Cost Per Use
Audience	Audience
Number of Faculty Requests	Number of ILL Requests
Number of Interlibrary loan Requests	New Academic Program Need
Cost	Number of Faculty Requests
Journal Metrics	Overlap
Interlibrary Loan Availability	Interlibrary Loan Availability
New Academic Program Need	Discoverability
Overlap	Usability
Faculty Request (Quality)	Previously Cut/Complaint
Accessibility	WVU Author/Editor
WVU Faculty Affiliation	Timeliness
WVU Affiliated Citations	Indexing
	Contractual Obligation
	Accessibility
	Review of the Item

Table: Comparison of journal selection rankings by Faculty Senate and Collections Advisory Committee rankings

#### Based on the exercise we found:

Both groups ranked audience, cost, number of faculty requests, and number of Interlibrary Loan
requests highly. Participants at Faculty Senate ranked usage the highest, where the definition
provided was "the number of times articles from the journal have been downloaded by WVU
users" (Appendix A). For the CAC, the criteria of usage was a combination of usage and cost.
Essentially we found that the two groups are largely in sync.

 Participants at Faculty Senate ranked Faculty Request(Quality), WVU Faculty Affiliation, and WVU Affiliated Citations at the bottom or near the bottom of the list, much lower than the CAC or Library Administration expected. This information is helpful in validating some of the Libraries' unarticulated practices.

# **COLLECTIONS ISSUE 2**

# Should the Libraries be negotiating new types of library contracts?

The landscape in which we negotiate contracts with publishers is changing quickly. Big Deal contracts that offer large amounts of content for one price are inflating at rates that have put them out of reach for WVU along with many other institutions across the U.S. and Europe. In response, many libraries are working to flip the model of scholarly publishing toward open access to ensure that all scholars have access to materials they need. This flip involves a variety of complex economic concerns.

#### Participants in this exercise:

- in large part, but with some exception, did not think that how the libraries work with these contracts will affect their research;
- did not have a strong opinion in any one direction as to whether the library should be engaging
  in these new types of contracts both as that question relates to cost as well as direct access to
  content.

#### Based on this exercise we found:

- a need for more information if faculty are to have a strong opinion around this issue and for the libraries to gain faculty support;
- a sense that such work would be better done by WVU in partnership with consortial partners;
- concerns that there are likely to be academic disciplinary differences around the issue;
- recognition that this could have impact on P&T issues. Any action needs to be careful to avoid dictating any P&T requirements.

# **COLLECTIONS ISSUE 3**

# Is WVU engaged in conversation about Open Access publishing as it relates to individual practice and P&T requirements?

If scholarly publishing is going to flip towards open access, there needs to be conversation around where WVU researchers stand on this issue as it relates to individual practices, P&T requirements, and culture.

#### Participants in this exercise:

- noted that their departments are not having conversations about publishing in open access journals;
- agree that there is value in having wider conversations about publishing practices as they relate to promotion and tenure;
- most frequently mentioned topical fit, prestige, and promotion and tenure when deciding where to publish their work;
- most frequently mentioned audience, impact factor, and prestige (in that order) when listing what factors OUGHT to determine the value of a publication in terms of promotion and tenure;
- most frequently mentioned impact factor, prestige, and audience (in that order) when listing what factors ACTUALLY determine the value of a publication in terms of promotion and tenure.

#### Based on this exercise we found:

- Reasons in favor of having conversations about publishing in OA journals include:
  - accessibility
  - o demonstrating value of scholarship to the public
  - funding
  - o increased leverage
  - o parity between campuses
  - o perceptions of open access

# Appendix A

# **Topic 1 Criteria Description Provided to Faculty Senate**

Accessibility: ADA compliance or web accessibility

Audience: How many potential faculty and students will be impacted by the purchase

Cost: Includes the cumulative cost and cost per usage

Faculty Request (Quality): When one faculty member says that the resource is critical to their research

Faculty Request (Quantity): The cumulative number of faculty requests

**Interlibrary Loan Availability**: The availability of an item to be requested via Interlibrary Loan. Articles requests are typically filled within 24 hours

**Interlibrary Loan Requests**: The number of times the articles for the journal have been requested through Interlibrary Loan

Journal Metrics: Impact Factor, for example

**New Academic Program Need**: In order to support a new academic program, WVU Libraries purchase or subscribe to relevant journals in the field

Overlap: When the same journal article can be found in multiple databases

Usage: The number of times articles from the journal have been downloaded by WVU users

WVU Affiliated Citations: The number of times WVU authors are cited in the journal

WVU Faculty Affiliation: If WVU faculty frequently publish in or are editors of a journal

# **Appendix B**

## **Individual Questions**

1. The terms of the Libraries' contracts with publishers significantly affect my ability to do research.

-						•
	Strongly	Agree	Not sure	Disagree	Strongly	
	agree				disagree	

2. The Libraries should negotiate for new contract models in place of traditional contracts, regardless of cost.

Strongly	Agree	Not sure	Disagree	Strongly
agree				disagree

3. The Libraries should hold out for new contract models with publishers, even if it means losing direct access to content.

Strongly	Agree	Not sure	Disagree	Strongly
agree				disagree

# **Group Questions**

1. As a group, how would you characterize the alignment of individual practices, departmental practices, and ideal practices regarding publishing practices at WVU?

1	2	3	4	5	6	7
All three						All three
are not at						are well
all aligned						aligned

- 2. Based on your alignment, do you think there is value in having wider conversations about publishing practices as they relate to promotion and tenure?
  - a. Yes
  - b. No
- 3. As a group decide which ONE of the following statements is true. If there were campus conversations about better aligning publishing practices, should the role of open access be part of that conversation?
  - a. There is no need to include open access publishing in conversations regarding priorities in the P&T process.
  - b. There is value in including open access publishing in conversations regarding priorities in the P&T process.

- c. We should prioritize open access publishing in conversations regarding priorities in the P&T process.
- 4. Please list reasons for including or not including OA as part of conversations regarding P&T requirements.

# MEMORANDUM 5/18/20

TO: FACULTY SENATE EXECUTIVE COMMITTEE

FROM: Bob Bastress, Chair, 2019-20 Research Integrity Committee

RE: "Report" of the Research Integrity Committee

There were no issues or cases brought before the Research Integrity Committee during the 2019-20 academic year and, therefore, the Committee held no meetings and took no actions. In other words, the Committee had a great year.

The Committee's goal for 2020-21 is to repeat this year's "performance."

#### Report for Research & Scholarship Committee

Faculty Senate Executive Committee Meeting (COVID-19 'Virtual' ZOOM)

May 18, 2020

#### **Current Members of the Committee**

General McArthur Hambrick, College of Creative Arts, Chair
Lesley Cottrell, School of Medicine, Chair-Elect
Thirimachos Bourlai, Statler College
Lynne Cossman, Eberly College
Danielle Emerling, University Librarians
Timothy Eubank, School of Medicine
Scott Fleming, Chambers College (New)
Jason Gossett, College of Creative Arts
Sarah Knox, School of Public Health
Bingyun Li, School of Medicine
Julie Lockman, School of Medicine
Jennifer Mallow, School of Nursing
Mark Nigrini, Chambers College
Charis Tsikkou, Eberly College
Melanie Page, Associate Vice President for Creative & Scholarly Activity- ex officio, non-voting

#### Overview

We started the year with 16 members. After two retired we were at 14, but Arron Scott Fleming agreed to come back on committee. He had been a member previously. So, we move into the new year with 15 members. We hope to increase that number by at least 6, making our roster 21. This year because of the overwhelming amount of applications, we recruited volunteers from all over the campus and gracefully accepted the challenge. A big 'Thank You' to Naomi Boyd, Helen Hartnett, Joseph Hodge, Jay Malarcher and Mark Tseytlin

## Our plans for the future include:

- Rewording the applications for clearer understanding of the expectations when presenting a proposal whether seed or scholarship.
- Continue to search for a solution in the score discrepancy
- Continue to work with reviewers on appropriate behavior when it comes to comments
- Decide whether it is better to have two or three reviewers per application
- > Increase the number and diversity of the Research and Scholarship Committee members

#### This year in Review:

- The Rubric was revised.
- > Two members retired and one rejoined
- > We funded a total of 43 Travel Grants in the Fall and 182 in the Spring in the amount of \$375k
- ➤ We funded a total of 14 Research & Scholarship Grants in the amount of \$150k

In this unprecedented time of COVID-19 we wait to see what the future holds and where any of us will be in the fall. We will continue to make this process and this committee a representation of all that is fair, good and forward-looking here at West Virginia University.

# 2019-202 WVU Faculty Senate Service Committee Report Submitted by: Lori Ogden – Committee Chair

#### **Committee Members:**

Lori Ogden, Eberly, Chair

Toni Morris, Eberly, Chair-elect
Gregory Dahle, Davis College
Eloise Elliott, CPASS
Becca Fint-Clark, Extension Service
Colleen Lillard, School of Medicine
Ashley Martucci, CEHS
Mark Nigrini, Chambers College
Ramana Reddy, Statler College
Kym Scott, College of Creative Arts
Jennifer Thornton, Eberly College
Lindsey Rinehart, Eberly College
Lidiane Castro Gregory, ex officio, Center for Service and Learning
Melanie Page, ex officio, Associate Vice President for Creative and Scholarly Activity

**Committee Charge:** The Service Committee shall evaluate proposals competitively submitted for support by Senate Service Funds and shall make recommendations concerning the service mission of the University as deemed appropriate.

**Committee Report:** The WVU Faculty Senate Service Committee held a Community Engagement Grant Workshop in October to encourage grant submissions and answer questions. Sixteen individuals attended in person and 18 people attended online. In addition, the Teaching and Learning Commons recorded the session and posted a recording of the event on the TLC YouTube Channel. (<a href="https://youtu.be/inquHlfsY7s">https://youtu.be/inquHlfsY7s</a>) Three past recipients participated as table anchors, leading conversations and sharing their own grant experiences.

The Committee received and reviewed 22 grant applications this year. A primary and secondary reviewer who entered their information in KC+ presented their report at the meeting this spring. Ten proposals were selected for full or partial funding for a total of \$60,024. Titles of the funded projects are as follows:

Transforming Healthcare: Voices of Transgender and Gender Diverse Patients in	
West Virginia	\$5,000
The West Virginia Impact Challenge	\$7,500
West Virginia University, School of Dentistry's Certified Tobacco Treatment	
Program Scholarship grant	\$6,600
Diabetes Screening in WV: A Collaborative Effort by a Multidisciplinary Team	\$7,200
Undefeated: Canvas(s)ing the Politics of Voter Suppression Since Suffrage	\$5,000

2021 Northeast Horn Workshop	\$8,000
WVU School of Music's Community Music Program Harps Purchase for Community	
Use	\$3,724
West Virginia Women Vote	\$5,000
Community-based Exercise to Promote Healthy Aging in Rural Seniors	\$5,000
Occupation-based community wellness groups	\$7,000

#### **Committee Goals:**

- 1. Encourage all faculty to consider submitting competitive Community Engagement grants.
- 2. Continue to educate faculty members on the Community Engagement grant application process to ensure that the grants remain competitive.
- 3. Continue to review, discuss, and disseminate funds for future Community Engagement grants.

# WVU Faculty Senate Committee on Shared Governance Annual Report, 2019-2020

#### **Membership**

Given the late date of the creation of this committee (June 2019, after the Committee on Committees had wrapped up its work for the 2018-2019 year), the out-going Chair of the Committee on Committees suggested that each College within West Virginia University select one person to represent their College, and the Senate leadership selected one senator from each College to oversee that selection process. The following people were chosen. With one exception, they were all elected members of the Faculty Senate:

Ed Bernardes, Chambers College
Kristina Olson, Creative Arts (was replaced by Michael Vercelli)
Larry Hildebrand, Dentistry
Scott Crichlow, Eberly - Chair
Karen Haines, Education & Human Services (was replaced by Keri Valentine)
Sam White, Extension
Jessica McMillen, Libraries
Julia Fraustino, Media
Robert Brock, Medicine
Kari Sand-Jecklin, Nursing
Gonzalo Bravo, CPASS
Ruchi Bandari, Public Health
Jean Woloshuk, Retired Faculty
Andrew Nix, Statler
Paul Rakes, WVUIT

Neither the College of Law nor the Keyser campus chose to select a faculty member to represent them on the committee.

#### Committee Charge

This committee was created as a result of a Faculty Senate vote at its June 2019 meeting. A proposal to create this committee had been proposed at the May 2019 meeting of the Faculty Senate, and the senators present voted to support that. Between the May and June meetings, the Executive Committee of the Faculty Senate decided not to move forward with the creation of this committee, regardless of the Faculty Senate's vote. At the June meeting it was proposed again, and the full Senate voted in favor of the committee again on the basis of the following committee charge presented at the June meeting.

WHEREAS, the Faculty Constitution authorizes the Faculty Senate, by resolution, to establish special committees, and

WHEREAS, issues of shared governance are critical to the smooth functioning of research and education at West Virginia University, and

WHEREAS, the Faculty Senate seeks to assist the University in assessing and understanding issues of shared governance, and

WHEREAS, the Faculty Senate has not recently compared our processes and procedures of shared governance to other institutions, therefore be it

RESOLVED, that the Faculty Senate Shared Governance Committee is created as a special committee for the calendar year June 10, 2019 - May1, 2020 year, unless sooner altered or terminated by resolution of the Faculty Senate, and be it

FURTHER RESOLVED that the Faculty Senate Shared Governance Committee shall present a report to the Faculty Senate no less than annually, and be it

FURTHER RESOLVED that the Faculty Senate Shared Governance Committee be charged with undertaking the following set of actions

- (1) Survey other institutions' governing documents to compare and contrast their definitions and processes of shared governance to that of West Virginia University, our Faculty Senate, and our Constitution.
- (2) Determine the type and amount of input faculty normally have at other institutions have with respect to input on specific administrative positions/titles/job descriptions, such as Provost, Vice-Provost, Associate-Provost, and Dean positions, and compare faculty input at West Virginia University to that at other institutions.
- (3) Examine the degree of input faculty normally have with respect to the people hired in administrative positions at West Virginia University, and compare that to other institutions.
- (4) Generally examine variances between protocols of shared governance at West Virginia University and other institutions and determine what variance exists if any between those institutions and ours.
- (5) Evaluate national trends and report on best practices related to shared governance in higher education, and consider making recommendations to appropriate University bodies including the Office of the President, the Office of the Provost, the West Virginia University Board of Governors, and other Centers, Colleges, Schools and programs affiliated with the University.
- (6) Address in a timely fashion other issues pertinent to the charge of the committee.

#### Activities

The committee met for the first time on September 3, 2019, convened by David Hauser, who had recently stepped down as Faculty Senate Chair. Eleven committee members were in attendance. The general approach the committee would take was set – with a focus on governing structures and governing and personnel processes, committee members would investigate how peer institutions function. Committee members would collect relevant documents from peer institutions and write short analyses of their systems to share with fellow committee members. Peer institutions would mean flagship and/or public land-grant universities. Given that different institutions have different systems and vary a great deal in regards to the types of information they share publicly, the committee would collect a variety of types of data. Committee members highlighted the value looking particularly closely at matters discussed in AAUP documents about properly-functioning universities, so that we would be focused on comparable data points that allow for concise, easily understandable comparisons. The committee decided to work toward a goal of presenting a report to the Senate in the late Spring of 2020.

While that general approach was agreed upon in September the committee did not elect a Chair at that time which delayed its work moving forward. Faculty Senate Chair Emily Murphy organized a meeting held on December 10, 2019 that 10 committee members attended. At that meeting Scott Crichlow from the Eberly College was elected as the committee's Chair, and attendees finalized which relatively comparable universities would be examined. Committee members collected relevant documents from 14 universities by mid-January and began the process of refining a draft document to present to the Senate about proposed changes at West Virginia University, in order to bring us in line with systems, policies, and procedures at peer universities. The 14 universities were:

Iowa State University
University of Missouri
Kansas State University
The Ohio State University
University of Wisconsin
University of Texas
Oklahoma State University
University of Kentucky
University of Tennessee, Knoxville
University of Florida
University of Connecticut
Michigan State University
University of Maryland
Virginia Tech

In reviewing these documents (the committee started to do so formally at its January 24, 2020 meeting) two matters stood out -1) there is a great deal of variation in the roles and powers university faculties have in setting university policies and in making university personnel and academic decisions, and 2) West Virginia University is clearly at the very low end on a continuum marking the influence faculty have over university decision making. The latter leaves faculty vulnerable in ways they are not at some peer institutions and is

not in line with AAUP guidelines. With that in mind, the committee began work on a "best practices" document that would move West Virginia University to being in line with peer institutions. There was considerable back-and-forth among committee members during the process of creating this document. A January draft was created, then, over a number of inperson meetings and group messaging exchanges a February draft was proposed, and then a final draft was agreed upon in March 2020. This draft, following peer-institution practices and AAUP recommendations, is focused on the different types of authority faculty have in the functioning of a large public university, and how that varies across a variety of policy domains and institutional functions. This is the committee draft:

# **DRAFT Shared Governance Policy Document**

WVU Faculty Senate Special Committee on Shared Governance March 9, 2020

**Authority** -- The faculty's authority, as delegated by the Board of Governors, is of three types: direct and primary, in which the faculty has essential decision-making authority; shared, in which the faculty participates with others; and advisory, in which the faculty counsels with the person or offices with ultimate decision-making authority (on those matters requiring multi-campus coordination, the faculty shall act through its appropriate bodies).

- A. **Primary and Direct Authority** -- The WVU faculty has essential decision-making authority in matters directly affecting the educational program of WVU, including but not limited to:
  - (1) Articulation and maintenance of standards of academic performance-this includes but is not limited to guidelines for appropriate research, service, and scholarships; and related matters.
  - (2) Construction and approval of courses of instruction and of curricula.
  - (3) Formulation of criteria determining professional standing of faculty -including but not limited to such matters as faculty appointments, tenure,
    promotion, termination, guidelines for responsibility, faculty standing with
    regard to graduate faculty membership, faculty appointments, and doctoral
    dissertation supervision.
  - (4) Selection of awardees for honorary degrees.
  - (5) Determination of appropriate faculty committee structures and membership.
- B. **Shared Authority** -- The WVU faculty has shared authority by which it participates cooperatively with other persons or offices in matters such as:
  - (1) Development and articulation of students' rights and responsibilities.
  - (2) Determination of an appropriate academic calendar.
  - (3) Determination of minimum admission requirements and graduation standards.
  - (4) Selection of awardees for academic scholarships.
  - (5) Application of criteria affecting professional standing of faculty.
  - (6) Selection of departmental, divisional, campus, and university-level administrators.

- (7) Construction and approval of procedures governing educational support programs on the WVU campus.
- C. **Advisory Authority** -- The WVU faculty has advisory authority and responsibility with other persons or offices in matters such as:
  - (1) Budget and resource allocation.
  - (2) Planning, including capital expenditures and physical facilities.
  - (3) Determination of campus committee structures or task forces and membership.
  - (4) Development and implementation of general business procedures which facilitate academic program excellence.
  - (5) Use of facilities for program activities.
  - (6) Periodic review of administrative personnel.

#### Moving Forward in 2020-2021

The committee's work ended unexpectedly early, given the COVID-19 pandemic. This is highly problematic given that the committee was approved to last for 2019-2020 academic year. Therefore, the committee's immediate priority is to be continued for another year, in order to move forward with the next stage in its work.

At the last committee meeting in the Spring the plan discussed was for the draft document be taken to the University's constituent colleges for discussion and debate that would precede discussion and presentation to the full Senate. This would include discussion about both the goals laid out in the draft document and discussion of procedural and systematic steps that could be taken to ensure these goals are met in practice, should the Faculty Senate vote in support of the document. The document is focused on roles and powers for faculty that are hoped to be achieved but leaves open the appropriate processes by which those goals would be reached. It is anticipated that much of what the committee would do next year would be to explore what is feasible toward implementation of the document.

# Faculty Senate Sustainability Committee Final Report 2019-2020

Dated: 5/4/2020

Contact: Amy Hessl, Chair of Faculty Senate Sustainability Committee (amy.hessl@mail.wvu.edu)

Approved (7-0) 5/4/20

#### Membership:

Name	Voting Status	Constituency	
Amy Hessl	Voting	Eberly Arts and Science	
Andrea Soccorsi	Voting	Eberly Arts and Science	
Hillar Klansdorf	Voting	Davis Ag, Resources and Design	
Jody Crosno	Voting	JCC Business and Economics	
Kim Floyd	Voting	College of Education and Human Services	
Kimberly Bailey	Voting	Medicine – Department of Surgery	
Michael Sherwin	Voting	College of Creative Arts	
Natasha Harrison	Voting	Medicine - Orthopedics	
Ramana Reddy	Voting	Statler Engineering	
Shawn Grushecky	Voting	Davis Ag, Resources and Design	
Tracie Evans	Voting	College of Education and Human Services	
Hailin Li	Voting	Statler Engineering	
Brandon Rothrock	Ex-Officio	Student Government Association	
Julie Black	Ex-Officio	Teaching and Learning Commons	
Traci Knabenshue	Ex-Officio	WVU Sustainability, Facilities	

#### Overview:

Faculty Senate Sustainability Committee, composed of 14 members (12 voting) met seven times during the 2019-2020 academic year. We elected Jody Crosno (JCC Business and Economics) Chair-Elect. Due to the broad charge of the committee from the Faculty Senate, we opted to form three working groups: curriculum review, organizational structure, and carbon audit. Reports from those working groups are provided below.

- 1. <u>Curriculum Review</u> (Julie Black, Jody Crosno, Andrea Soccorsi, Hillar Klansdorf, Michael Sherwin)
  - a. Goal: Assess WVU's sustainability curriculum as it compares to peer institutions.

- b. Summary Findings: WVU compares very well with peer institutions in terms of course offerings. WVU has over 300 courses that reflect a commitment to sustainability/environmental studies. Please see attached reports on sustainability degree programs at WVU and peer institutions (Appendix 1) and sustainability course offerings at WVU (Appendix 2).
- c. Recommendations: Adopt Association for the Advancement of Sustainability in Higher Education (AASHE) suggestions for promoting sustainability curriculum including:
  - 1. Utilize the Office of Sustainability in course planning and activities
  - 2. Establish a sustainability representative to build student led programs
  - 3. Offer credit for internships in sustainability
  - 4. Conduct field trips on sustainability
  - 5. Invite speakers in the field of sustainability
  - 6. Use the campus as a laboratory

- 2. Organizational Structure (Ramana Reddy, Kim Floyd, Brandon Rothrock; Tracie Evans)
  - a. Goal: Assess WVU's administrative structure in support of sustainability as it compares to peer institutions.
  - b. Investigated Big 12 Sustainability Offices
  - c. Summary Findings:
    - i. All but four report to Association for the Advancement of Sustainability in Higher Education (AASHE) (WVU, Kansas State, Oklahoma, TCU)
    - ii. Most have small Offices of Sustainability (1-3 full-time employees). Most include the Director of Operations, Director of Transportation, and a Provost in meetings.
    - iii. Almost all of the universities had sustainability as a part of the University's Strategic Plan.
    - iv. Committees included reps from across campus (students, faculty, staff), reporting up to VP or Provost.
    - v. Universities had published goals on sustainability.
  - d. Recommendations: Create a long-term and broad structure for sustainability with representation from across the university.
    - i. Expand the WVU Office of Sustainability from 2 to 4 people including an educational coordinator (to support AASHE educational goals above) and facilities engineer (to support energy conservation).
    - ii. Create a Sustainability Leadership Council, with representatives from across the university including faculty, students and staff. Council would operate at the top level of WVU administration and should be responsible for setting and publishing university goals on sustainability.
    - iii. Create a Student Council on Sustainable Leaders in support of curriculum, activities on campus, and service.
    - iv. Explore funding options to create a Green fund to support student initiatives.
- 3. Carbon Audit (Hailin Li, Amy Hessl, Traci Knabenshue, Shawn Grushecky)
  - a. Goal: Determine best practices for a carbon audit at a land grant institution.
  - b. Investigated carbon management at peer institutions, explored platforms and tools for conducting carbon audit and researched feasibility at WVU.
  - c. Summary Findings:
    - i. Peers and Land Grant Institutions:
      - 1. Big 12: Kansas State University: 80% reduction (relative to 2005) in university operations carbon footprint by 2050. Other peers have less aggressive targets. Iowa State: target of 25% renewable energy by 2025. University of Texas at Austin: reports emissions annually but has no published goals for emissions reductions.

- 2. Land Grant: 45 of 73 land grant institutions (62%) have published goals to achieve sustainability, reduce emissions, or reach carbon neutrality. Of the 24 land grants with readily available information, 71% pledged to meet their goals by 2050 (Table 1). Also see Appendix 3 Land Grant Carbon Policies.
- ii. Carbon Audit tools: SIMAP, a carbon and nitrogen accounting platform designed for institutions of higher education, is used by 90% of US colleges and Universities that publicly report emissions. The cost ranges from free to \$400/year and it provides excellent resources to get the institution started.
- iii. Data are available. Committee met with Daniel Lemasters. WVU engineer, and Samuel Taylor, WVU Energy Institute, who confirmed that data from main campus and WVU Medicine are available.
- iv. Carbon reductions goals help build research capacity. Progress made towards diversifying WVUs energy portfolio has the potential to support future research proposals at the Energy Institute and across campus.

#### d. Recommendations:

- i. Conduct a full carbon audit for fiscal year 2018 (July 1 2017 June 30th 2018).
- ii. Scope of the carbon audit should be WVU main campus, Health Sciences Campus and all regional campuses where data collection and access are feasible.
- iii. Committee recommends that the carbon audit should be completed with SIMAP and repeated every three years.
- iv. Committee recommends setting clear, ambitious and near-term emissions targets to propel the university's teaching, research and land grant role toward a sustainable future. We suggest: WVU makes a commitment to reduce carbon emissions by half of 2018 levels by 2030 and reach carbon neutrality by 2050

#### 4. Further Recommendations

- a. This committee commends WVU for beginning its submission to the AASHE STARS program. Sustainability Tracking, Assessment, and Rating System (STARS) is an international reporting framework specific to higher education for colleges and universities to measure their sustainability performance. Currently, over 900 institutions report to STARS.
  - i. As part of the assessment, STARS evaluates 17 sustainability "impact areas," including transportation, purchasing, dining, construction, energy, grounds maintenance and curriculum.
  - ii. AASHE reviews all submissions and assigns institutions a rating of reporting, Bronze, Silver, Gold, or Platinum and that rating is valid for three years.
  - iii. In addition to helping WVU establish clear sustainability goals, the STARS designation also will help legitimize WVU's sustainability efforts among peer institutions.

- iv. At WVU, 25 different departments across the university will collaborate to complete all categories by the end of July. The first submission will apply to the Morgantown campus only.
- b. Faculty senate sustainability committee recommends continuing to maintain the committee for one additional academic year in order to ensure that progress towards recommendations are made.

Table 1 Number of land grant institutions with pledges to meet sustainability goals for three date ranges. Data were gathered from institution websites as well as http://reporting.secondnature.org.

Sustainability Goal	Number of Land Grant Schools
Now - 2035	5
2036-2050	17
2051-2065	2

#### Appendices:

Appendix 1. Peer Institution and WVU Programs in Sustainability

Appendix 2. WVU Sustainability and Climate Change Courses

Appendix 3. Land Grant Carbon Policies

Peer Institution	Major/Minor	Degree	College/School/Department	Area of Emphasis/Sample Coursework
Baylor University	Environmental Studies	B.A.	Arts and Sciences	
Iowa State	Environmental Studies	Secondary Major or Minor	Arts and Sciences	
	Environmental Science(Interdisciplinary)	B.S. M.A. PhD	College of Agriculture and Life Sciences Arts and Sciences	
	Sustainability Minor (Interdisciplinary)			
	Wind Energy (Interdisciplinary)			
	Design in Sustainable Environments (Masters) Sustainable Agriculture (Masters and Doctorate) Urban Design (Masters) Wind Energy Science, Engineering and Policy (Doctorate)			
Kansas State	Environmental Studies	B.A. and B.G.S	Arts and Sciences	
Oklahoma State	Environmental Science	Major and Minor BSAG	Agricultural Sciences and Natural Resources	Environmental Policy Natural Resources Water Resources

Texas Christian	Environmental Science Sustainability	B.S. M.S. M.E.M Minor M.A.	College of Science & Engineering  Department of Environmental Sciences	<ul> <li>Ecology and the Environment</li> <li>Understanding the Earth</li> <li>Geomorphology</li> <li>Soils in the Environment</li> <li>Water and Wastewater Technology</li> <li>Environmental Compliance</li> </ul>
Texas Tech	Wind Energy  Environmental Sustainability and Natural Resources (Natural Resources Management concentration)	B.S. M.A.		
University of Kansas	Environmental Geology Environmental Engineering Environmental Studies	B.A. B.G.S B.S. Minor Graduate Certificate	Arts and Sciences Engineering	
University of Oklahoma	Environmental Studies  Environmental Sustainability  Environmental Science  International and Area Studies Major Area: Global Energy, Environment and Resources	B.S. B.A B.S. B.A B.S. B.A B.S. B.A B.S. B.A B.S. B.A	College of Atmospheric and Geographic Sciences/ School of Civil Engineering and Environmental Science  College of International Studies	Global Energy, Environment, and Resources

UT Austin	Environmental Science Sustainability Studies	B.S.	Arts and Sciences	
	,	B.A. in Geography	Department of Geography and the Environment	

HOME Institution	Major/Minor	Degree	College/School/Department	Area of Emphasis/Sample Coursework
West	Environmental,	B.S.	Davis College of Agriculture, Natural	Environmental Assessment and
Virginia	Soil and Water		Resources and Design	Reclamation
University	Sciences		School of Agriculture and Food	Soil and Water Sciences
	Sustainability			
	Studies			
	Agroecology	BSAgr	Davis College of Agriculture, Natural	Crop Science
			Resources and Design	Soil Health
			School of Agriculture and Food	Plant Health Management
			_	Entrepreneurship/Agriculture
				Business
	Environmental	ВА	Eberly College of Arts and Sciences	
	Geoscience	BA	Department of Geology and	
	deoscience		Geography	
			Geography	
	Environmental	BS	Davis College of Agriculture, Natural	Energy
	and Energy		Resources and Design	
	Resources		School of Natural Resources	
	Management			
	Environmental	BS	Davis College of Agriculture, Natural	Landscape Architecture
	and Community		Resources and Design	Community
	Planning		School of Design and Community	Environment
			Development	
	Environmental			
	Protection	Minor	Davis College of Agriculture, Natural	
			Resources and Design	
			School of Design and Community	
			Development	
	Sustainable			
	Design	Minor	Davis College of Agriculture, Natural	
			Resources and Design	
			School of Design and Community	
			Development	
	Conservation			
	Ecology	Minor	Davis College of Agriculture, Natural	
			Resources and Design	
			School of Natural Resources	
	Environmental	Minor		
	Protection			

Geography	ВА	Davis College of Agriculture, Natural Resources and Design School of Natural Resources	Global Environmental Change
		Eberly College of Arts and Sciences Department of Geology and Geography	

Subject	Course	Course Title	Course Text
AEM	401	Environmental Microbiology	AEM 401. Environmental Microbiology. 4 Hr. PR: AEM 341 or Consent. Microbiology as applied to soil, water, wastewater, sewage, air, and the general environment.
		<i>,</i>	Occurrence, distribution, ecology, and detection of microorganisms in these environments. (Also listed as ENVP 401.)
AEM	420	Soil Microbiology	AEM 420. Soil Microbiology, 3 Hr. PR: AEM 341. Microbiology and biochemistry of the soil environment. Occurrence, distribution, ecology, and detection of micro-
		0,	organisms in soil. (Also listed as AGRN 420 and ENVP 420.)
AGEE	460	Engr Tech Urban Watrshd/Irrgat	AGEE 460. Engineering Technology for Urban Watersheds and Irrigation. 3 Hr. Soil and water management; analysis of small watersheds and design of waterways,
-		9	culverts, ponds, sediment basins, and turf irrigation systems. (3 hr. lec.)
AGEE	461	Waste Management-Composting	AGEE 461. Waste Management-Composting. 3 Hr. Both present and alternative waste management strategies will be examined. Students will learn how to analyze
		The state of the s	the waste stream and be able to develop management concepts which are both economically and environmentally sound. Lectures by waste management
			professionals will be integrated into the class to expose the students to the very latest practices and technology.
AGRN	120	Principles of Agroecology	AGRN 120. Principles of Agroecology. 3 Hr. Agroecology is the study of interactions among organisms and the environment in agricultural systems and broader
,	120	· ····cipies of / ·g. occordgy	interactions with the biosphere to meet human needs and provide ecosystem services while minimizing their ecological footprint. We will explore the structure and
			function of agroecosystems across a range of climate, landscape/soil, and crop and animal components.
AGRN	202	Principles of Soil Science	AGRN 202. Principles of Soil Science. 3 Hr. PR: CHEM 111 or equivalent and PR or CONC: AGRN 203. Introductory course. Soils as a natural resource emphasizing
7101111	202	Trinciples of soil science	physical, chemical, and biological properties in relation to plant growth and production, land use and management, soil and water pollution, and environmental
			protection. (Regional campus concurrent.)
AGRN	420	Soil Microbiology	AGRN 420. Soil Microbiology. 3 Hr. PR: AEM 341. Microbiology and biochemistry of the soil environment. Occurrence, distribution, ecology, and detection of micro-
AGINI	420	3011 Wile Obiology	organisms in soil. (Also listed as AEM 420 and ENVP 420.)
AGRN	425	Environmental Soil Management	AGRN 425. Environmental Soil Management. 3 Hr. PR: AGRN 202 and AGRN 203. This course provides a foundation for utilizing creative solutions and technical
AGNIV	423	Environmental Son Management	
			knowledge in preserving and enhancing soil and water quality. Soil conservation, precision agriculture and nutrient management for protection of soil and water quality are covered. (Also listed as ENVP 425.)
AGRN	430	Soil Physics	AGRN 430. Soil Physics. 3 Hr. PR: AGRN 202 and AGRN 203. Physical properties of soils; water and air relationships and their influence on soil productivity.
	187	· · · · · · · · · · · · · · · · · · ·	
ARE	187	Energy Resource	ARE 187. Energy Resource Economics. 3 Hr. Dilemmas posed for developing and modern societies by rising energy demands amid concerns for the world's
ARE	204	Driverials December 9 Frances	environment. Economics of fuel sources and technologies, and historical and new concerns over resource scarcities.
AKE	201	Principle Resource & Energy	ARE 201. Principles of Resource and Energy. 3 Hr. PR: Third-year standing. Analyzes problems important or peculiar to mineral industry economics; exhaustion,
			externalities, risks, production cycle, industry structure, pricing, role of minerals in development and trade, resource planning. Energy, metals, industrial minerals. (3
4 D.E.	220	Inter Section and I/December 5	hr. lec.)
ARE	220	Intro Envirnmntl/Resource Econ	ARE 220. Introductory Environmental and Resource Economics. 3 Hr. Economic analysis of environmental pollution, natural resource conservation and management,
	202		outdoor recreation, public land use, wildlife resources, water use, property rights, and benefit-cost issues.
ARE	382	Agri and Natural Resources Law	ARE 382. Agricultural and Natural Resources Law. 3 Hr. Introduction to legal concepts, principles and practices related to environmental, natural resource, and
			agricultural issues; in the context of the legal system within which statues are enacted, administered and enforced.
ARE	401	Applied Demand Analysis	ARE 401. Applied Demand Analysis. 3 Hr. Consumer demand economics applied to environmental, natural resource, and agricultural issues; analysis of factors that
			influence demand and determine prices; special applications to non-market, environmental, and natural resource amenities.
ARE	410	Environmentl/Resource Economics	ARE 410. Environmental and Resource Economics. 3 Hr. PR: (ARE 401 and ARE 402) or ECON 301 or consent. Economic analysis of natural resource and
			environmental problems; management of renewable and non-renewable resources and environmental amenities; market failure, externalities, benefit-cost and risk
			analysis; property rights and the "taking" issue.
ARE	445	Energy Economics	ARE 445. Energy Economics. 3 Hr. Analysis of the energy sector and its relationship to the rest of the economy; energy security, deregulation, full cost pricing,
			substitutability among energy sources, transmission, new technologies, environmental considerations.
ARE	450	Agr/Envrmntl & Resource Policy	ARE 450. Agriculture, Environmental and Resource Policy. 3 Hr. PR: ARE 150 or ECON 201 or consent. Economic analysis of agricultural, natural resource and
			environmental policies; problems of externalities and market failure, and alternative policies for addressing such problems; benefits and cost of alternative policies.
ARE	485	Econ of Water Res and Energy	ARE 485. Economics of Water Resources and Energy. 3 Hr. PR: Calculus with a grade of B- or better or consent, introductory micro economics with a C- or consent.
			Allocation under scarcity, water institutions and management, risk, pricing, marketing, demand and supply estimation, interdependence between energy and water
			resources (Credit cannot be received for both ARE 485 and ARE 585).
ARE	580	Energy Industry Economics	ARE 580. Energy Industry Economics. 3 Hr. PR: Graduate standing. Technical production and consumption methodologies, environmental concerns, and national and
			global economics and politics in making energy decisions.
ARE	585	Econ of Water Res and Energy	ARE 585. Economics of Water Resources and Energy. 3 Hr. PR: Calculus with a grade of B- or better or consent, introductory micro economics with a C- or better or
			consent. Allocation under scarcity, water institutions and management, risk, pricing, marketing, demand and supply estimation, interdependence between energy
			and water resources (Credit can not be received for both ARE 485 and ARE 585).
ARE	600	Research Methods	ARE 600. Research Methods. 1 Hr. Research methods in agricultural, environmental, and resource economics. The application of scientific thinking in developing
			research proposals and critiquing published research.

Subject	Course	Course Title	Course Text
ARE	601	Applied Microeconomics	ARE 601. Applied Microeconomics. 4 Hr. PR: ARE 401 or equiv. Consumer and production economics applied to resource, environmental, and agricultural analysis.
		F.F	
ARE	621	Quantitative Methds-Resrc Econ	ARE 621. Quantitative Methods in Resource Economics. 3 Hr. PR: ARE 601 and ECON 421 or equivalents. Optimization techniques in economic analysis of natural
			resources; environmental and agricultural management problems; linear, nonlinear, and dynamic programming.
ARE	624	Econometric Methds-Resrc Econ	ARE 624. Econometric Methods in Resource Economics. 3 Hr. PR: ECON 425. Application methods to natural resource, environmental, and agricultural economic
			problems; single and simultaneous equation models, specification problems, topics in time series, and cross-sectional analysis.
ARE	632	Natrl Res/Environmental Econ	ARE 632. Natural Resource and Environmental Economics. 3 Hr. PR: ARE 600 and ARE 621 or equivalent. Theory and institutions; market failure, externalities and
		,	property rights issues; renewable and nonrenewable resources, common property, environmental and resource management, and intergenerational decisions.
			, , , , , , , , , , , , , , , , , , , ,
ARE	633	Natural Resource Policy Analys	ARE 633. Natural Resource Policy Analysis. 3 Hr. PR: ARE 600 and ARE 621, or equiv. Welfare economics applied to the analysis and evaluation of natural resources,
		, , , , , , , , , , , , , , , , , , , ,	environmental, agricultural, and energy policy issues.
ARE	703	Adv Naturl Resourc Econ Theory	ARE 703. Advanced Natural Resource Economic Theory. 3 Hr. PR: ECON 710 and ARE 632. Allocation and distribution of natural resources in static and dynamic
		,	contexts; welfare economics, cost-benefit analysis, and optimal control approaches; applications to resource valuation, exhaustion, taxation, and regulation in theory
			and practice.
ARE	710	Adv Environmental Economics	ARE 710. Advanced Environmental Economics. 3 Hr. PR: ECON 701 and ARE 632 or Consent. Theory, efficient environmental design and analysis, modeling of
,	7.20	nav Environmental Eddinomics	economic and environmental systems, evaluation of non-market benefits and costs, and risk assessment.
ART	380	Art and Environment	ART 380. Art and Environment. 3 Hr. PR: Must pass freshman review and complete 6 hours of 200-level coursework in area of emphasis or consent. Interdisciplinary
,	550	, a c and Environment	studio/seminar course investigating art's relationship to the environment through readings, field trips, presentations and studio practice.
ART	580	Art and Environment	ART 580. Art and Environment. 3 Hr. PR: Registered graduate student. Interdisciplinary studio/seminar course investigating art's relationship to the environment
,	300	A C dild Environment	through readings, field trips, presentations, and studio practice.
BIOL	105	Environmental Biology	BIOL 105. Environmental Biology. 3 Hr. (Intended for non-biology majors.) Population growth and human impacts on the environment, including ecosystem
DIOL	103	Environmental biology	destruction, biological diversity, pollution, and global climate change are explored to obtain the concepts necessary to understand complex environmental issues of
			our time.
BIOL	106	Environmental Biology Lab	BIOL 106. Environmental Biology Laboratory. 1 Hr. Field and laboratory exercises explore fundamental ecological concepts and environmental problems, such as
DIOL	100	Environmental biology Eas	biodiversity, pollution, and natural resource utilization.
BIOL	318	Writing Appalachian Ecology	BIOL 318. Writing Appalachian Ecology. 3 Hr. This course encourages students to think about the long-term future of our planet. What could our world be like in 200
DIOL	310	Witting Apparachian Ecology	years? How will current environmental problems change the future? How will relationships with the natural world change? Students address questions like these in
			creative nonfiction essays they write about research being conducted at the Fernow Experimental Forest in WV.
BIOL	338	Behavioral Ecology	BIOL 338. Behavioral Ecology. 3 Hr. PR: BIOL 112 or BIOL 221. Consideration of the influences of environmental factors on short-and long-term regulation, control,
DIOL	330	benavioral Ecology	and evolution of the behavior of animals. Students on the Morgantown campus will be required to complete BIOL 221.
BIOL	352	Plant Anatomy/Development	BIOL 352. Plant Anatomy and Development. 4 Hr. PR: BIOL 117 or PLSC 206. How plants (especially angiosperms) develop, stand up, defend themselves, transport
DIOL	332	riant Anatomy, bevelopment	food and water, and reproduce; also evolution and uses of wood and bark. Students observe development from spores, seeds, and cuttings. (Two local field trips.)
			1000 and water, and reproduce, also evolution and asces of wood and stark. Stateths observe development from spores, seeds, and eattings. (1900 local field trips.)
BIOL	365	Conservation Biology	BIOL 365. Conservation Biology. 3 Hr. PR: BIOL 221 or WMAN 313. Review of literature, research, and application of topics including biodiversity, endangered species,
DIOL	303	conservation biology	population biology, extinction, invasive species, conservation, restoration, and sustainability.
BIOL	446	Freshwater Ecology	BIOL 446. Freshwater Ecology. 4 Hr. PR: (BIOL 101 and BIOL 102 and BIOL 103 and BIOL 104) or BIOL 115 or WMAN 224 or consent. Physical, chemical, and
DIOL	110	Treshwater Leology	biological characteristics of inland waters with emphasis on the structure and function of stream ecosystems. (Also listed as WMAN 446.)
BIOL	463	Global Ecology	BIOL 463. Global Ecology. 3 Hr. PR: BIOL 221. The Earth viewed as a changing biogeochemical system. Topics include the structure, composition and dynamics of the
DIOL	103	Global Ecology	ecosphere, nutrient cycles, changing atmospheric composition, climate change, ozone depletion, land-use change, biological invasions, and changes in biodiversity.
			complete, nutricite cycles, changing authorphic composition, climate change, ozone depiction, tand discriming in bloodyersity.
BIOL	466	Ecology	BIOL 466. Ecology. 4 Hr. PR: BIOL 112 and CHEM 116. Principles of environmental biology, population dynamics and evolution. Field trips and lab work.
BIOL	752	Physiological Plant Ecology	BIOL 752. Physiological Plant Ecology. 3 Hr. PR: BIOL 350 and consent. Advanced studies on the interactions between plants and their environment focusing on
	1.52	,	whole-plant carbon exchange, water relations, and nutrient uptake, with reference to specific biomes.
BIOL	753	Water/Nutrient Relations-Plant	BIOL 753. Water and Nutrient Relations of Plants. 3 Hr. PR: BIOL 350 and consent. Advanced studies on water and nutrient acquisition, use, and transformation in
	1.55		plants with focus on plant-soil interactions, symbiotic associations, and acclimation and adaption mechanisms operating in plants.
СНЕМ	312	Environmental Chemistry	CHEM 312. Environmental Chemistry. 3 Hr. PR: CHEM 215 and CHEM 234 and physical chemistry. Study of the nature, reactions, transport, and fates of chemical
S. ILIVI	312	2	species in the environment. (2 hr. lec., 1 hr. demonstration.)
CHEM	512	Environmental Chemistry	CHEM 512. Environmental Chemistry. 3 Hr. PR: CHEM 215 and CHEM 234 and CHEM 348. Study of the nature, reactions, transport and fate of chemical species in
	1		the first state of the first sta

Subject	Course	Course Title	Course Text
DSGN	280	Sustainable Design & Develop	DSGN 280. Sustainable Design and Development. 3 Hr. An overview of social, environmental and economic aspects of the built environment. Site considerations,
			infrastructure, green buildings, marketing, financing, community. (Local field trips possible.)
DSGN	293C	SPTP:Green Built Environment	DSGN 293C. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered by regularly scheduled courses.
DSGN	293G	SPTP:Applied Sustainabl Living	DSGN 293G. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
DSGN	340	Design for Energy Efficency	DSGN 340. Design for Energy Efficiency. 3 Hr. An overview of energy efficiency in residential and small commercial settings. Energy, building shell, air leakage,
			insulation, hvac, lighting, appliances, water heating, indoor air quality. (Local field trips possible.)
DSGN	470	LEED Green Building Systems	DSGN 470. Leadership in Energy and Environmental Design Green Building Systems. 3 Hr. PR: DSGN 280. A detailed study of the LEED green building certification
			systems, including the various green systems, codes and standards referenced by LEED.
DSM	550	Precision Drawing and Modeling	DSM 550. Precision Drawing and Modeling. 3 Hr. PR: Consent. Develops student's working knowledge of the opportunities and constraints associated with using
			advanced digital representational instruments for precise design, visualization and construction of architectural environments.
DSM	693C	SPTP:Planning Sustainbl Cities	DSM 693C. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
DSM	693L	SPTP:Plan Sustainable Cmmunts	DSM 693L. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
EE	434	Alternitive Energy Resources	EE 434. Alternative Energy Resources. 3 Hr. PR: EE 335 and EE 336. Working principles of alternative distributed energy technologies. Modeling, control,
			interconnection methords, and applications of modern alternative power generation resources. Future directions of alternative energy.
EE	493X	SPTP:Alterntv Energy Resources	EE 493X. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
ENGL	338	Environmental Criticism	ENGL 338. Environmental Criticism. 3 Hr. PR: ENGL 102 or ENGL 103. This course provides methods for exploring connections between literature and the
			environment. Topics include nature writing; animal studies; environmental justice; urban ecocriticism; literary cartography; ecological theory.
ENGL	393B	SPTP:Environmental Criticism	ENGL 393B. Special Topics. 1-6 Hr. PR:Consent. Investigation of topics not covered in regularly scheduled courses.
ENTR	416	Social Entrepreneurship	ENTR 416. Social Entrepreneurship. 3 Hr. PR: ENTR 400. This course will expose students to the topics and concepts in the emerging field of social entrepreneurship.
			The primary topic - how social entrepreneurs use business models to create sustainable enterprises.
ENVP	119	Soil in the City	ENVP 119. Soil in the City. 3 Hr. Study of soil as a natural resource in urban environments; influence of soils on urban development; study of environmental
		,	problems related to soils in urban land uses.
ENVP	155	Elements-Environmtl Protection	ENVP 155. Elements of Environmental Protection. 3 Hr. An introduction to land and water resources and their management and protection. An evaluation of the
			relationships between human activities and natural environments and the interaction between natural resource utilization and development.
ENVP	255	Elements of Environ Mngmt	ENVP 255. Elements of Environmental Management. 3 Hr. PR: ENVP 155. An introduction to the various regulations promulgated by the United States Environmental
			Protection Agency. The main goal of this course is to provide the student with a foundation of knowledge that will allow them to read and interpret environmental
			regulations as well as all types of regulations and codes.
ENVP	325	Principles of Water Resources	ENVP 325. Principles of Water Resources. 3 Hr. PR: MATH 124 or higher. This course provides students an opportunity to increase their knowledge pertaining to the
			role(s) that water plays in human and environmental systems by examining the geographic distribution/redistribution, quantity, and quality of water resources.
			Students are introduced to water management evaluation policies, law and economics used to explore the decision-making challenges surrounding water resources.
ENVP	355	Environmentl Sampling/Analysis	ENVP 355. Environmental Sampling and Analysis. 3 Hr. PR: BIOL 101 and BIOL 102 and BIOL 103 and BIOL 104 and CHEM 115 and CHEM 116. Introduction to
			environmental sampling methods and analysis. Lecture and hands-on experience will include sampling plan development, sample point selection, sampling
			equipment use, containers and preservatives, sample analysis, chain-of-custody and protective equipment.
ENVP	401	Environmental Microbiology	ENVP 401. Environmental Microbiology. 4 Hr. PR: AEM 341 or consent. Microbiology as applied to soil, water, wastewater, sewage, air, and the general
			environment. Occurrence, distribution, ecology, and detection of microorganisms in these environments. (Also listed as AEM 401.)
ENVP	420	Soil Microbiology	ENVP 420. Soil Microbiology. 3 Hr. PR: AEM 341. Microbiology and biochemistry of the soil environment. Occurrence, distribution, ecology, and detection of
			microorganisms in soil. (Also listed as AEM 420 and AGRN 420.)
ENVP	425	Environmental Soil Management	ENVP 425. Environmental Soil Management. 3 Hr. PR: AGRN 202 and AGRN 203. This course provides a foundation for utilizing creative solutions and technical
			knowledge in preserving and enhancing soil and water quality. Soil conservation, precision agriculture and nutrient management for protection of soil and water
			quality are covered. (Also listed as AGRN 425).
ENVP	460	Environmental Impact Assessmnt	ENVP 460. Environmental Impact Assessment. 3 Hr. PR: BIOL 101 and BIOL 102 and BIOL 103 and BIOL 104 and CHEM 115 and CHEM 116. Application of physical,
			biological and social science principles to assess environmental impacts. Review and prepare environmental assessments, permits, site assessments and ecological
			risk assessments for environmental decision-making.
ENVP	525	Principles of Water Resources	ENVP 525. Principles of Water Resources. 3 Hr. Geographic distribution/redistribution, quantity, and quality of water resources and their roles in human and
			environmental systems. Applies alternative policy frameworks to explore the decision-making challenges surrounding water resources.
ENVP	555	Erviron. Sampling and Analysis	ENVP 555. Environmental Sampling and Analysis. 3 Hr. PR: ENVP 155 or consent. Introduction to environmental sampling ans analysis. Lecture and hands-on
			experience will include sampling plan development, sampling point selection, sampling equipment use, containers, preservatives sample analysis, chain-of-custody,
			protective equipment and technical report development.

Subject	Course	Course Title	Course Text
FDM	412	Fashion Sourcing and SCM	FDM 412. Fashion Sourcing and Supply Chain Management. 3 Hr. PR: FDM 360 or FDM 361 with a minimum grade of C- or consent. This course evaluates key issues
			facing fashion businesses in the global marketplace. It includes an examination of internal and external forces affecting political, economic, social, environmental and
			ethical production, and distribution of textile and apparel products.
FDM	460	Sustainability in Fashion	FDM 460. Sustainability in Fashion. 3 Hr. PR: FDM 411 with a minimum grade of C- or consent. This course examines sustainability in the context of cultural,
		,	economic, environmental, social, and technological policies and procedures of fashion industries. Factors analyzed include ethics, government policies, international
			labor standards, environmental regulations, company priorities, consumer responsibilities, economic impact, and worker rights.
FHYD	444	Watershed Management	FHYD 444. Watershed Management. 3 Hr. PR: FMAN 212 and FMAN 311. (Primarily for forest management majors.) Influences of silvicultural practices and forest
			management activities on the hydrology of forested catchments.
FHYD	454	Field Watershed Hydrology	FHYD 454. Field Watershed Hydrology. 3 Hr. PR: FHYD 444. A quantitative understanding of measurement theory, field techniques, instrumentation, and data
2	.5.	ricia trateisnea riyarology	analysis including technical computational programming used to study hydrologic systems including climate, streams, riparian areas, hill slopes, shallow
			groundwater, and watersheds.
FHYD	655	Watershed Hydrology	FHYD 655. Watershed Hydrology. 3 Hr. PR: Prior course work/experience in hydrology, water, earth and atmospheric sciences or permission by the instructor. A
5	000	Trace silea il y al ology	qualitative and quantitative understanding of principles governing the occurrence, distribution, and cirulation of water near the Earth's surface. Emphasis is on the
			physical understanding and parameterization of hydrologic processes and the water cycle.
FMAN	212	Forest Ecology	FMAN 212. Forest Ecology. 3 Hr. PR: FOR 205. Forest and environment factors; site and type characteristics.
FMAN	433	Forest Management	FMAN 433. Forest Management. 3 Hr. PR: FMAN 400 and FMAN 311 and FMAN 330. Principles of sustained yield forest management: organization of forest areas,
IIVIAIN	433	Torest Management	selection of management objectives, application of silvicultural systems, and regulation of cut. Principles of sustainable forestry and ecosystem management.
			Selection of management objectives, application of silvicultural systems, and regulation of cut. Finispies of sustainable forestly and ecosystem management.
FMAN	440	Forestry Consulting	FMAN 440. Forestry Consulting. 3 Hr. PR: FMAN 311 and FMAN 330 or consent. The application of forest management principals and business concepts to the
1117.414	140	Torestry consuming	consulting forestry profession. Topics include: natural resource inventories, timberland appraisals, timber sale administration, and forest management planning.
			consulting forestry profession. Topics include: natural resource inventories, timber and appraisals, timber and continued in forest management planning.
FMAN	540	Current Issues-Forest Managmnt	FMAN 540. Current Issues in Forest Management. 3 Hr. PR: Consent. Analysis of environmental issues in forest management and current controversies surrounding
	3.0	carrent issues i orest managimit	the management of forested lands. Emphasis on traditional and ecosystem-based forest management policy, philosophy, and practices.
FMAN	693H	SPTP:Fld Mthds-Watershd Hydrlg	FMAN 693H. Special Topics. 1-6 Hr. A study of contempary topics selected from recent developments in the field.
FMAN	694A	SEM:Natural Resource Science	FMAN 694A. Seminar. 1-6 Hr. Seminars arranged for advanced graduate students.
FOR	101	Careers-Natrl Resourcs Mang 1	FOR 101. Careers in Natural Resources Management 1. 1 Hr. (Required only for students who rank as freshman in the Division of Forestry.) An introduction to
	101	careers main nessares mang 1	professional activities in forest resources management, recreation and parks management, wildlife and fisheries management, and wood science and utilization.
			Survey of major issues in natural resources management and conservation.
FOR	140	W Va Natural Resources	FOR 140. West Virginia's Natural Resources. 3 Hr. Survey of policies and practices in development and use of soil, water, forest, wildlife, mineral, and human
1011	140	VV Va Natarar Nessarces	resources in West Virginia.
FOR			- Cook Cook - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
FOR	240	Intro Computing -Ntrl Resource	FOR 240. Introduction to Computing in Natural Resources. 3 Hr. Introduction to computer applications in natural resource management. Emphasis on MS Excel
	2.0	mare companing real nessearce	statistical analysis tools, MS Access, Visual Basic Programming, hand held PCs and application examples.
FOR	293E	SPTP:Intro-Energy Land Manag	FOR 293E. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
FOR	326	Remote Sensing of Environment	FOR 326. Remote Sensing of Environment. 3 Hr. PR: (MATH 126A or MATH 126B or MATH 126C) and MATH 128. Measurement and interpretation of natural
	520	nemote sensing or zimmennem	resources and environment from photography and radar, infrared, and microwave imagery.
FOR	340	Nat Resources Entrepreneurship	FOR 340. Natural Resource Entrepreneurship. 3 Hr. Principles of small business start-up, organization, marketing, finance, and management with an emphasis on
	3.0	nat nessaress zna eprenearsinp	natural resource-based enterprises.
FOR	421	Renwabl Resourcs Policy/Govrnc	FOR 421. Renewable Resources Policy and Governance. 3 Hr. PR: Consent. Forest, wildlife, fisheries, and recreation resource policies of world, with an emphasis on
1011	721	Remada Resource Folloy, Govine	the U.S.: important federal and state laws; governance of public and private lands and renewable natural resources. (Crosslisted with WMAN 421.)
			and older interest and state laws, government of public and private lands and renewable natural resources. (erosansted with www.v-vzz.)
FOR	425	Global Forest Resources	FOR 425. Global Forest Resources. 3 Hr. Significance of renewable natural resources on a global scale and the ecological, economic, and social contexts in which they
	1.23	2.234. 0.0000004.000	are managed. Emphasis is on world forest resources, including timber, wildlife, and social uses.
FOR	438	Human Dimensions Nat Rsrc Mang	FOR 438. Human Dimensions Natural Resource Management. 3 Hr. This class is designed to provide junior-and-senior level forestry and natural resource
. 511	130		management majors with a repertoire of social and communication knowledge and skills such as public facilitation, public participation, social impact assessment,
			conflict management, and collaborative planning techniques.
FOR	470B	Prblms:Freshwater Fishing	FOR 470B. Problems in Forestry, Wood Science, Wildlife, or Recreation. 1-4 Hr. PR: Forestry senior or consent.
FOR	575	Forest Soils:Ecology-Managment	FOR 575. Forest Soils: Ecology and Management. 3 Hr. PR: AGRN 410 or AGRN 425 or consent. Properties, nutrient cycling processes, and sustainable management
· OIN	3/3	Torest John Leology-Managinetit	of forest soils, with examples from the most important wood fiber producing regions of the U.S.: the southeast, Pacific Northwest, and the central hardwood forest.
			or roles), with examples from the most important wood noer producing regions of the O.S., the southeast, Pathic northwest, and the central nardwood forest.

Subject	Course	Course Title	Course Text
FOR	650	Econ, Environ & Education in WV	FOR 650. Economics, Environment and Education in West Virginia. 3 Hr. This course is designed for K-12 classroom teachers with little previous background in
			economics. We introduce the principles of economics using the WV forest products industry to provide examples.
FOR	670	Human Dimnsions-Natl Rsrc Mang	FOR 670. Human Dimensions of Natural Resource Management. 3 Hr. PR: Grad standing. This course applies social science theory and methods to solving natural
			resource management problems.
FTEC	204	Forest Harvesting	FTEC 204. Forest Harvesting. 3 Hr. PR: MATH 124. Fundamentals of forest harvesting systems, occupational safety and health, environmental issues, equipment
	20.	, o. est 11d. 7 est.11.6	evaluation and selection, and trucking of forest products.
GEOG	106	Physical Geography Laboratory	GEOG 106. Physical Geography Laboratory. 1 Hr. PR or CONC: GEOG 107. Introduction to global environmental systems operating on the earth's surface, emphasizing
0200	100	Trysical deagraphy Educatory	weather and climate, soils, natural vegetation, and geomorphology, and examination of human interaction with these natural processes.
GEOG	107	Physical Geography	GEOG 107. Physical Geography. 3 Hr. Introduction to global environmental systems operating on the earth's surface, emphasizing weather and climate, soils, natural
GLOG	107	Triysical Geography	vegetation, and geomorphology, and examination of human interaction with these natural processes.
GEOG	110	Environmental Geoscience	GEOG 110. Environmental Geoscience. 3 Hr. Physical aspects of the earth with emphasis on natural resources, environmental degradation and hazards. Registration
GLOG	110	Liviloiiiieitai Geoscience	in GEOG 111 meets requirements for a 4-hr. credit in laboratory science. (Also listed as GEOL 110.) (Students may not receive credit for GEOG 110 and GEOL 101 or
			GEOL 110.)
CFOC	111	Facility and the Constitution Lab	'
GEOG	111	Environmental Geoscience Lab	GEOG 111. Environmental Geoscience Laboratory. 1 Hr. PR or Conc: GEOG 110. (Also listed as GEOL 111.) (Students not receive credit for GEOG 111 and GEOL 102 or
CEOC	450	District Fronts	GEOL 111.)
GEOG	150	Digital Earth	GEOG 150. Digital Earth. 3 Hr. PR or CONC: GEOG 149. Recent advances in technology and data availability have increased our knowledge about the world. This class
		<u> </u>	surveys key concepts of geospatial technologies (GIS, remote sensing, spatial analysis) in the context of social and environmental change.
GEOG	205	Natural Resources	GEOG 205. Natural Resources. 3 Hr. Introduces the concept of natural resources and surveys such topics as land, soil, rangeland, forests, water, atmosphere,
			minerals, and energy. Emphasis is on the United States within the context of the global environment.
GEOG	207	Climate And Environment	GEOG 207. Climate and Environment. 3 Hr. Examination of atmospheric processes and the impact of human activity on climate.
GEOG	302	Political Geography	GEOG 302. Political Geography. 3 Hr. Examines the interrelationship between politics and the environment, human territoriality, the political organization of space,
			geopolitical aspects of the nation-state and international problems.
GEOG	303	Cultural Geography	GEOG 303. Cultural Geography. 3 Hr. This course engages students in current research in cultural geography. What does a geographic approach contribute to
			understandings of culture? These perspectives are relevant to analyzing the politics of race, gender, the environment, and our place in it. Cultural geographers
			critically and creatively explore the ways humans develop a sense of place and their struggles over place and culture.
GEOG	321	Geomorphology	GEOG 321. Geomorphology. 3 Hr. PR: GEOL 101 and GEOL 102. An examination of earth-surface processes and landforms, with emphasis on environmental
			geomorphology, streams, floods, glaciers, and landslides. (Required field trip at student's expense; also listed as GEOL 321.)
GEOG	407	Environmental Field Geography	GEOG 407. Environmental Field Geography. 3 Hr. PR: GEOG 107 and GEOG 307. An introduction to field methods used in environmental and physical geography.
			Course uses a problem based approach.
GEOG	415	Global Environmental Change	GEOG 415. Global Environmental Change. 3 Hr. PR: GEOG 107 or equivalent or consent. A geographic analysis of the Earth system emphasizing the interdependence
			and feedback mechanisms of the hydrologic cycle, ecosystems, climate, and human activities.
GEOG	443	African Environment & Devlpmnt	GEOG 443. African Environment and Development. 3 Hr. Detailed examination of the intersection of environmental and development studies in sub-Saharan Africa
			with critical assessments of current practice.
GEOG	454	Environmental GIS	GEOG 454. Environmental Geographic Information Systems. 3 Hr. Provides background and hands-on experience needed to answer scientific questions about the
			environment within a raster-based GIS framework. Students should have introductory-level GIS background.
GEOG	461	Web GIS	GEOG 461. Web GIS. 3 Hr. PR: GEOG 350. The World Wide Web has become a valuable means to display, collect, and share geographic data and maps. This course
			will explore the use of web technologies for developing web map applications. Students will learn to produce audience appropriate maps in the web environment
			using a variety of technologies and methods.
GEOG	494Q	SEM:Environmental Conflict	GEOG 494Q. Seminar. 1-3 Hr. PR:Consent. Presentation and discussion of topics of mutual concern to students and faculty.
GEOG	499	GLobal Service Learning	GEOG 499. Global Service Learning, 1-3 Hr. PR. Consent. Theory and practice of global service learning. The main objective will be to pair the experiential aspects of
			meainingful and sustained service in the host community with work from the student's anchor course by offering a methodological framework for cultural immersion
			and community service as well as adding to the content of the anchor course.
GEOG	654	Environmental GIS Modeling	GEOG 654. Environmental Geographic Information Systems Modeling. 3 Hr. Provides background and hands-on experience needed to answer scientific questions
3200	034	Environmental dis Modelling	about the environment within a raster- based GIS Framework. Students should have introductory level GIS background.
GEOG	692H	Dir St:WV Watershed Dynamics	GEOG 692H. Directed Study. 1-6 Hr. Directed study, reading, and or research.
GEOL	111	Environmental Geoscience Lab	
GEUL	111	Environmental Geoscience Lab	GEOL 111. Environmental Geoscience Laboratory. 1 Hr. PR or CONC: GEOL 110. (Also listed as GEOG 111.) (Students may not receive credit for GEOG 111 and GEOL
CEOL	200	Coology for Environ Salantists	102 or GEOG 111.)  CEGU 200 Coology for Equipmental Scientists. A Nr. DB: (CEGU 110 and CEGU 111) or (CEGU 110) and CEGU 101 and CEGU 102 and CEGU 103 and CEGU 1
GEOL	200	Geology for Environ Scientists	GEOL 200. Geology for Environmental Scientists. 4 Hr. PR: (GEOL 110 and GEOL 111) or (GEOG 110 and GEOG 111) or (GEOL 101 and GEOL 102 and GEOL 103 and
			GEOL 104). Fundamentals of mineralogy, sedimentation, stratigraphy, petrology, and structural geology needed by environmental scientists to understand earth
			materials. (Required field trips partial student expense.) (3 hr. lec., 1 hr. lab.)

Subject	Course	Course Title	Course Text
GEOL	203	Physical Oceanography	GEOL 203. Physical Oceanography. 3 Hr. (Not open to upper division geology majors.) The geography and geology of ocean basins and margins, the chemical and
			physical properties of sea water, and the examination of the source and location of resources in the sea.
GEOL	321	Geomorphology	GEOL 321. Geomorphology. 3 Hr. PR: (GEOL 101 and GEOL 102) or (GEOL 110 and GEOL 111) or (GEOG 110 and GEOG 111). An examination of earth-surface
			processes and landforms, with emphasis on environmental geomorphology, streams, floods, glaciers, and landslides. (Required field trip at student's expense; also
			listed as GEOG 321.)
GEOL	351	Geomathematics	GEOL 351. Geomathematics. 3 Hr. PR: GEOL 101 and (MATH 154 or MATH 155). Mathematical methods and applications in geology, geochemistry, geophysics, and
			environmental science. Review of basic mathematics, differential and integral calculus. Use of computers (Excel) as geological problem-solving tools.
GEOL	365	Environmental Geology	GEOL 365. Environmental Geology. 3 Hr. PR or CONC: GEOL 321. Principles, practice, and case histories in application of earth science to environmental problems.
			Includes: water quality; landslides; subsidence; waste disposal; legal aspects; and geological aspects of land-use planning. (Field trips and independent field project
			required.)
GEOL	376	Research Methods	GEOL 376. Research Methods. 3 Hr. PR: Completion of Introductory Geology sequence, GEOL 101 and GEOL 102 and GEOL 103 and GEOL 104. Research Methods is a
			one-semester, three-hour course in the required WVUteach sequence. It is one of several content courses specially designed to meet the needs of future teachers.
			WVUTeach students pursuing degrees in Geology or Environmental Geoscience should register for the GEOL section of BIOL/CHEM/GEOL/PHYS 376.
GEOL	400	Environmental Practicum	GEOL 400. Environmental Practicum. 1 Hr. PR: GEOL 200 and PR or CONC: GEOL 331 or GEOL 365 or GEOL 376 or GEOL 411 or GEOL 455 or GEOL 463 or GEOL 472 or
			GEOL 486 or GEOG 317 or GEOG 443 or GEOG 454 or GEOG 455 or GEOG 456 or GEOG 461. Capstone Seminar. Students prepare for a career as Environmental
			Geoscientists; critically reflect on the curriculum in the major; orally present their research projects carried out in the co-requisite. Research-intensive Geology and
			Geography course.
GEOL	454	Environmtl/Explratn-Geophys 1	GEOL 454. Environmental and Exploration of Geophysics 1. 3 Hr. PR: PHYS 102 and (MATH 156 or GEOL 351). Basic theory, computer modeling, and use of
			gravitational, magnetic, resistivity, and electromagnetic methods in the evaluation or shallow targets of interest to environmental, hydrological, and hazardous waste
			site investigations.
GEOL	462	Introductory Hydrogeology	GEOL 462. Introductory Hydrogeology. 3 Hr. PR: (GEOL 101 and GEOL 102) or (GEOL 110 and GEOL 111) or (GEOG 110 and GEOG 111) and (MATH 126 and MATH
			128) and (CHEM 110 or (CHEM 110A and CHEM 110B) or CHEM 111 or CHEM 115). Basic principles of hydrogeology, emphasizing geologic occurrence of ground
			water, vadose (soil) water, wells, springs, ground water interaction with streams, and ground-water chemistry, pollution, and pollution restoration.
GEOL	463	Physical Hydrogeology	GEOL 463. Physical Hydrogeology. 3 Hr. PR: GEOL 101 and MATH 126. Principles of ground-water hydrology, emphasizing the physical occurrence and movement of
			ground water. Topics include aquifer properties, flow net analysis, and hydraulic aquifer testing.
GEOL	472	Energy Geology	GEOL 472. Energy Geology. 3 Hr. PR: GEOL 101 and GEOL 102 and GEOL 103 and GEOL 104. Energy needs will continue to increase as the human population grows
			and the quality of life increases for the world. To provide these energy needs, humans draw on a wide portfolio of renewable and nonrenewable energy resources.
			Examination of the geologic aspects and science of energy and present a balanced view of humanity's past, present and future energy resource options.
GEOL	484	Minerals and the Environment	GEOL 484. Minerals and the Environment. 3 Hr. PR: GEOL 284 or GEOL 200. Study of the importance of minerals in human health and the environment. Includes
			examples of environmental problems that are caused by minerals and solutions to environmental problems that involve minerals.
GEOL	486	Environmental Isotopes	GEOL 486. Environmental Isotopes. 3 Hr. PR: CHEM 111 or CHEM 115. Isotopes are excellent natural tracers and integrators of important environmental, geological
			and ecological processes. Topics include basic principles of stable isotope geochemistry and their applications in environmental sciences, hydrology, plant/animal
			ecology, climate reconstruction, and energy.
GEOL	488	Environmental Geochemistry	GEOL 488. Environmental Geochemistry. 3 Hr. PR: GEOL 351 and CHEM 116. Basic review of physical and aqueous chemistry, discussion of basic geochemical
			processes; calcium carbonate chemistry, digenetic processes, weathering, the silicate and iron system.
GEOL	493Y	SPTP:Isotopes in Environment	GEOL 493Y. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
GEOL	564	Environmental Hydrogeology	GEOL 564. Environmental Hydrogeology. 4 Hr. PR: GEOL 101 and GEOL 102 and GEOL 463 and (PR or CONC: GEOL 562). Seminar reviewing groundwater occurrence,
			flow, quality, and exploration in various geologic terrains; groundwater pollution and dewatering; and groundwater technology. Includes topical literature review.
CFO!	500	Overvie Contemple and Con Cl	CFOLFOO Constitute Contractor 2 Ha This constitute is a few and the state of the st
GEOL	580	Organic Contaminant GeoChem	GEOL 580. Organic Contaminant Geochemistry. 3 Hr. This course focuses on fundamental chemical properties and structures of organic contaminants that control
			their functionality, fate, and transport in the environment. Natural organic matter and inorganic phases are discussed relative to contaminant mobility.
CEOL	500	Advanced backers Construction	CEOLEGE Advanced to the Continuity of the December of the Continuity of the Continui
GEOL	586	Advanced Isotope Geochemistry	GEOL 586. Advanced Isotope Geochemistry. 3 Hr. PR: GEOL 486. Advance the understanding of isotopic systems by comprehensive discussion of selected research
			publications. Laboratory exercises will provide hands-on training in stable isotope measurement techniques. Study topics will focus on use of isotopes to address
			research questions in variety of fields, including geology, biology, forensics, environmental sciences and energy.

Course	Course Title	Course Text
588	Aqueous Geochemistry	GEOL 588. Aqueous Geochemistry. 3 Hr. PR: GEOL 101 and CHEM 112 or CHEM 116, or Consent. Review of basic chemical principles as they apply to aqueous
		geochemical environments. Properties of water and the types, sources, and controls of the common and environmentally significant chemical species dissolved in
		water.
591Y	ADTP: Environmental Geochem	GEOL 591Y. Advanced Topics. 1-6 Hr. PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.
785	Readings-Environmental History	HIST 785. Readings in Environmental History. II. 3 Hr. Examines broad themes including settlement patterns, attitudes toward nature, the rise of ecological science,
		and agricultural and industrial practices. Explores historiographical and methodological issues. (May be repeated once.) (Alternate years.)
786	Seminar-Environmental History	HIST 786. Seminar in Environmental History. II. 3 Hr. Directed research involving primary and secondary sources. Will focus on regional case studies and examination
		of broad intellectual and policy themes. (May be repeated once.) (Alternate years.)
433	Energy Efficiency/Sustainablty	IENG 433. Energy Efficiency and Sustainability. 3 Hr. Principles of energy efficiency for large industrial and large commercial building systems. Determination of
		energy usage, use of energy analysis and diagnostic equipment, and the development of energy efficiency measures including the economics related to
		implementation. Review of energy generation, renewable energy, smart grid, energy management, ASHRAE standards, and LEED. Sustainability aspects of energy
		efficiency.
493J	SPTP:Energy Efficiency/Sustain	IENG 493J. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
693V	SPTP:Environmental Marketing	IMC 693V. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
105	Intro:LandArch/EnvDes/Planning	LARC 105. Introduction to Landscape Architecture, Environmental Design and Planning. 3 Hr. A general overview of the field of landscape architecture,
		environmental design and planning. The course reviews the practices of design and planning professionals and their connections to society. An emphasis is placed on
		past development traditions and current sustainable development methods, strategies, and impacts of planning and design through the review of past and current
		projects.
120	Landscape Architecturl Drawing	LARC 120. Landscape Architectural Drawing. 3 Hr. PR: For landscape architecture majors only. Introduction to elements of visual techniques in drafting, basic design,
		and environmental systems. (Two 3-hr. studios.)
493Y	SPTP:Environmental/Public Art	LARC 493Y. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
494	Sem:Environmental Design	LARC 494. Seminar. 1-3 Hr. PR: Consent. Presentation and discussion of mutual concern to students and faculty.
565	Sustainable Cities: Best Pract	LARC 565. Sustainable Cities: Best Practices. 3 Hr. Surveys basic concepts, theories, and metrics of measuring and evaluating the trends of urban sustainability; it
		profiles influential urban design and planning visionaries; and examines best practices in developing sustainable, smart, and resilient human-made space at the scale
		of a site, neighborhood, community, city, and region.
570	Meanings of Place	LARC 570. Meanings of Place. I. 3 Hr. PR: Consent Study of place as a psychological and social phenomenon with implications for community development, historic
		preservation, interpretation, design, management, natural and cultural sustainability, and human well-being. (equivalent to RPTR 570)
593G	SPTP:Adv Envirnmntl/Public Art	LARC 593G. Special Topics. 1-6 Hr. A study of comtemporary topics selected from recent developments in the field.
650	Land and Env. Planning&Design	LARC 650. Land and Environment Planning and Design. 5 Hr. PR: LARC 550 with a minimum grade of B Introduction to and understanding of environmental
		planning, design and management of natural and social landscape systems at a regional, watershed, or ecosystem scale. Studies focus on systems inventory, analysis
		and impact assessment. GIS and 3D modeling applications will be integrated into this course.
604	Natural Resources	LAW 604. Natural Resources. 3 Hr. A survey course that includes law, theory, and practical management challenges of natural resource policy, with a strong
		substantive foundation in a broad range of resources, including water, timber, minerals, and wildlife.
613	International Environmentl Law	LAW 613. International Environmental Law. 2-3 Hr. An issue- based approach to IEL, identifying pressing problems such as global climate change, ozone depletion,
		biodiversity, and studying some of the instruments and tools that have been created to deal with them.
627	Land Use/Sustnbl Devlp Clnc 1	LAW 627. Land Use/Sustainable Development Clinic 1. 7 Hr. A clinical course offered to selected, upper level law students, who with faculty supervision, will provide
		transactional pro bono representation to clients regarding land and water protection.
628	Land Use/Sustnbl Devlp Clnc 2	LAW 628. Land Use/Sustainable Development Clinic 2. 7 Hr. PR: LAW 627. A continuation of LAW 627, presenting an opportunity for a higher level of responsibility,
		finalization of matters, and continued assistance for actual clients regarding land and water protection.
663	Renewable Energy & Alt Fuels	LAW 663. Renewable Energy & Alternative Fuels. 3 Hr. This course examines the convergence of energy and environmental issues, and includes a review of
		renewable and low-carbon energy sources as well as the various incentives to encourage development of renewable energy and alternative fuels.
689D	Sem:Environmental Law	LAW 689D. Seminar: Environmental Law. 2 Hr. This seminar provides a practical setting for environmental law in a litigation context that uses a case study method.
6891	Sem:Environmental Justice	LAW 689I. Seminar: Environmental Justice. 2 Hr. A broad view of environmental justice issues and their impact on minorities and disempowered citizens and
0031	Jenn. Linvironinientai Justice	
689W	Sem:Issues in Energy Law	communities.  LAW 689W. Seminar: Issues in Energy Law. 2 Hr. This seminar provides an understanding of a variety of issues regarding energy law and policy, both past and
	588  591Y 785  786  433  493J 693V 105  120  493Y 494 565  570  593G 650  604 613 627 628 663 689D	588 Aqueous Geochemistry  591Y ADTP: Environmental Geochem 785 Readings-Environmental History  786 Seminar-Environmental History  433 Energy Efficiency/Sustainablty  493J SPTP:Energy Efficiency/Sustain 693V SPTP:Environmental Marketing 105 Intro:LandArch/EnvDes/Planning  120 Landscape Architecturl Drawing  493Y SPTP:Environmental/Public Art 494 Sem:Environmental Design  565 Sustainable Cities: Best Pract  570 Meanings of Place  593G SPTP:Adv Envirnmntl/Public Art 650 Land and Env. Planning&Design  604 Natural Resources  613 International Environment Law  627 Land Use/Sustnbl Devlp Clnc 1  628 Land Use/Sustnbl Devlp Clnc 2  663 Renewable Energy & Alt Fuels  689D Sem:Environmental Law

Subject	Course	Course Title	Course Text
LAW	689Y	Sem:Sustainable Development	LAW 689Y. Seminar in Sustainable Development. 2 Hr. Consideration and further development of concepts and methods relating to sustainable development,
			including methods for incorporating consideration of economic development, environmental conservation, and social equity in decision-making at the regional,
			national and global level.
LAW	789	Law-Environmental Protection	LAW 789. Law of Environmental Protection. 3 Hr. Problems of identifying and evaluating scientific evidence of air and water pollution; weighting the benefits of
			economic and technological progress against resulting harm to the quality of life; choice among alternative forms of litigation and public regulation as methods of
			social control.
MAE	493R	SPTP:Renewable Energy Engr	MAE 493R. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
MAE	593S	SPTP:Vehicle Energy Efficiency	MAE 593S. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
MAE	593V	SPTP:Renewable Energy Engr	MAE 593V. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
MKTG	425	Sustainable Marketing	MKTG 425. Sustainable Marketing. 3 Hr. PR: BCOR 350 with a minimum grade of C Explores current environmental strategies focusing on reaching organizational
			goals and sustainable performance through marketing theory and practice.
MKTG	426	Sustainability Strategy	MKTG 426. Sustainability Strategy. 3 Hr. PR: BCOR 350 with a minimum grade of C Using simulations and current theory, students will gain hands-on experience
			that will allow them to better understand the complexity of sustainable strategies and meeting stakeholder needs.
OEHS	691B	ADTP: Environmental Policy	OEHS 691B. Advanced Topics. 1-6 Hr. PR: Consent. Investigation in advanced topics that are not covered in regularly scheduled courses.
PLSC	140	Sustainable Living	PLSC 140. Sustainable Living. 3 Hr. Explores the personal, social, economic, and environmental aspects of making sustainable choices. Sustainability principles and
			practices are discussed along with assessments of consumption and lifestyle decisions. Also listed as DSGN 140 and RESM 140.
POLS	338	Environmental Policy	POLS 338. Environmental Policy. 3 Hr. Explores the formulation and implementation of environmental policy, using both a policy process approach and policy
			analysis. Includes a discussion of the scientific, technological, risk, economic, and political variables which affect policy making in this area.
POLS	593J	SPTP:Energy/Envrnmntl Politics	POLS 593J. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
PUBA	593A	SPTP:Sustainable Devlop/China	PUBA 493A. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
PUBA	755	Sustainable Community Dvlpmnt	PUBA 755. Sustainable Community Development. 3 Hr. Explores the theory, principles, and ethics of economic, environmental, and social sustainability as applied to
			community and economic development activities, with a focus on project and program implementation.
PUBA	7911	ADTP:Sustainable Comm/Econ Dev	PUBA 791I. Advanced Topics. 1-6 Hr. PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.
PUBA	791P	ADTP:US Environmental Policy	PUBA 791P. Advanced Topics. 1-6 Hr. PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.
PUBH	243	Issues in Environmental Health	PUBH 243. Issues in Environmental Health. 3 Hr. PR: PUBH 101. Provides an overview of environmental and occupational issues relating to air, water, and solid waste
			as they relate to human health. Basic environmental health concepts, technologies and underlying data will be examined to better understand local, national and
			global solutions to environmental health problems.
RESM	140	Sustainable Living	RESM 140. Sustainable Living. 3 Hr. Explores the personal, social, economic and environmental aspects of making sustainable choices. Sustainability principles and
			practices are discussed along with assessments of consumption and lifestyle decisions. Also listed as DSGN 140 and PLSC 140.
RESM	460	Energy Project & Program Mgmt	RESM 460. Energy Project and Program Management. 3 Hr. PR: Junior or Senior Standing. The concepts and best practices of modern project management as applied
			to manage activities that meet the requirements of energy and environmental resource industry related programs and projects.
RESM	480	Environmental Regulation	RESM 480. Environmental Regulation. 3 Hr. Course focusing on laws and policies applicable to the environment. Students will learn to read and interpret statutes,
			regulations and cases that impact water, air, toxic substances, land and endangered species.
RESM	493R	SPTP:Energy Operations/Policy	RESM 493R. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
RESM	493U	SPTP: Watershed Analysis	RESM 493U. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
RESM	493X	SPTP:Appld Envirnmntl Protect	RESM 493X. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.
RPTR	239	Sustainable Tourism Developmnt	RPTR 239. Sustainable Tourism Development. 3 Hr. This course will introduce students to the phenomenon and significance of global tourism and teach them how to
			apply tourism principles to support community economic development.
RPTR	242	Environmentl/Culturl Interpret	RPTR 242.Environmental and Cultural Interpretation. 3 Hr. This course is about people, communication and natural resource management. It focuses on theory and
			application of communication methods for natural resource settings and topics, including communication of technical information to lay publics.
RPTR	351	Sustainable Tourism	RPTR 351. Sustainable Tourism. 3 Hr. PR or CONC: RPTR 352. The purpose of this course is to provide students of all majors with an understanding of both theory
			and practical applications of concepts surrounding sustainable tourism development in the South Pacific.
RPTR	353	Sust. Tourism in Patagonia	RPTR 353. Sustainable Tourism in Patagonia. 3 Hr. PR: RPTR 150; Winter Break excursion in Patagonia, Chile. This course will provide a theoretical and applied study
			of sustainable tourism and the ecosystems and culture of the Aysen region of Patagonian Chile. Alongside local guides and entrepreneurs, students will explore
			nature-based tourism and investigate how this tourism can be an agent of sustainable development. Student will investigate contemporary controversial issues in
			Chilean Patagonia.
RPTR	434	Wilderness American Society	RPTR 434. Wilderness in American Society. 3 Hr. PR: RPTR 433 or consent. A seminar examining political, sociological, and environmental aspects of American
		·	wilderness. A discussion on articles concerning wilderness preservation, management, and aesthetics.

Subject	Course	Course Title	Course Text
RPTR	448	Ecotourism Development	RPTR 448. Ecotourism Development. 3 Hr. Covers applied approaches to the development and operation of nature-based tourism businesses. Sustainable tourism
			principles, business planning, marketing strategies, and management issues are thoroughly examined.
RPTR	450	Social Research Methods-NRM	RPTR 450. Social Research Methods in Natural Resource Management. 3 Hr. Social research methods in natural resource management with concentration on
			problem identification and solving. Data collection methods and applications specific to natural resource management social settings will be studied.
RPTR	472	Tourism System/Destinatn Mang	RPTR 472. Tourism System and Destination Management. 3 Hr. Analysis of the demand and supply components of the tourism system and identification of
			destination management approaches to manage this tourism system in-order to build and maintain a competitive and sustainable destination.
RPTR	570	Meanings of Place	RPTR 570. Meanings of Place. 3 Hr. Study of place as a psychological and social phenomenon with implications for community development, historic preservation,
			interpretation design, management, natural and cultural sustainability, and human well-being. (Equivalent to LARC 570.)
RPTR	718	Participatory Approaches NRM	RPTR 718. Participatory Approaches Natural Resource Management. 3 Hr. This seminar style class focuses on the adoption of more participatory approaches to
			managing natural resources. Specific topics will include the use of advisory committees, mediating conflicts, facilitation skills, management partnerships and public
			participation plans.
RPTR	738	Tourism Planning	RPTR 738. Tourism Planning. 3 Hr. Use of natural settings; integration of tourism development with respect to environmental protection concerns. (Field trip
			required; some transportation and food costs.)
RPTR	752	Tourism & Natural Resourc Mktg	RPTR 752. Tourism and Natural Resources Marketing. 3 Hr. Apply the principles of marketing to tourism and natural resources emphasizing the convergence of
			increasing tourism demand and destination/resource competitiveness and sustainability.
SAFM	502	Control Envrmntl/Persnl Hazard	SAFM 502. Controlling Environmental and Personnel Hazards. 3 Hr. Investigation of hazard control principles relating to environmental facilities and equipment
			including control procedures recommended by authorities from the fields of engineering, medicine, and public health as well as from the field of safety.
SAFM	580	Fundamentls-Environmental Mang	SAFM 580. Fundamentals of Environmental Management. 3 Hr. An introductory but comprehensive overview of topics related to environmental technology as it
			applies to safety management. Focuses on regulation and technology relative to environmental management. Includes field trip.
SOCA	458	Environmental Anthropology	SOCA 458. Environmental Anthropology. 3 Hr. Critical ethnographic analysis of environmental problems, activism, and potential solutions, including issues related to
			biodiversity conservation, sustainability, natural disasters, industrial contamination, environmental knowledge, risk perception, and nature/culture dynamics among
			Western and non-Western peoples.
SOCA	693R	SPTP:Adv Environmntl Anthropgy	SOCA 693R. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
WDSC	320	Sustainable Construction	WDSC 320. Sustainable Construction. 3 Hr. Introduction to common building practices used in residential construction with emphasis on sustainable, "green"
	400		construction.
WDSC	422	Harvesting Forest Products	WDSC 422. Harvesting Forest Products. 3 Hr. PR: MATH 128 or equivalent and WDSC 232. Analysis of ground-based and cable harvesting systems, including time and
			motion studies, productivity and cost analysis, occupational safety and health, environmental issues, equipment evaluation and selection, and trucking of forest
WDCC	444	Die heerd France Contains	products. (2 hr. lec., 1 hr. lab.)
WDSC	444	Bio-based Energy Systems	WDSC 444. Bio-based Energy Systems. 3 Hr. Introduction to biomass feedstock production for bioenergy application, preprocessing and characterization, biofuel
WDSC	470	Manufaction Founds Dundwicts	conversion technologies, economic and environmental impacts, and greenhouse gas emissions.
WDSC	470	Marketing Forest Products	WDSC 470. Marketing Forest Products. 3 Hr. This course will examine techniques used by the forest products industry to market commodity, value-added specialty,
WDSC	540	Adv Physical Behavior of Wood	and sustainable (i.e., "green") products.  WDSC 540. Advanced Physical Behavior of Wood. 3 Hr. PR: WDSC 340 or equivalent or consent. Physical relationships of water and wood; fluid flow through wood;
WDSC	540	Adv Physical Beliavior of Wood	thermal, electrical, and acoustical behavior of wood. Theories of wood drying and their application.
WDSC	644	Adv. Bio-Based Energy Systems	WDSC 644. Advanced Bio-Based Energy Systems. 3 Hr. Introduction to biomass feedstock production for bioenergy applications, preprocessing and characterization,
WDJC	044	Auv. bio-based Effergy Systems	biofuel conversion technologies, economic and environmental impacts, and green house gas emissions.
WMAN	175	Intro to Wildlife & Fisheries	WMAN 175. Introduction to Wildlife and Fisheries. 3 Hr. Introduction to the study and management of wildlife and fisheries resources of the Appalachians. Includes
VVIVIAIV	173	intro to whalife a risheries	an overview of resource management history, career opportunities, natural resources policy, and the basic life of birds, mammals, and fishes.
			an overview of resource management instally, career opportunities, natural resources policy, and the disale like of birds, manifestally, and the same of birds, manifestally, and the same of birds, manifestally, and the same of birds, and the same of bi
WMAN	260	Waterfowl Ecology	WMAN 260. Waterfowl Ecology. 3 Hr. Intensive field-trip and on-line material emphasizing the ecology of waterfowl and management of wetland habitats.
	200	waterion zoology	
WMAN	421	Renwabl Resourcs Policy/Govrnc	WMAN 421. Renewable Resources Policy and Governance. 3 Hr. PR: Consent. Forest, wildlife, fisheries, and recreation resource policies of the world, with an
			emphasis on the U.S. important federal and state laws; governance of public and private lands and renewable natural resources. (Crosslisted with FOR 421.)
			printed lands and resident and and res
WMAN	445	Intro/Fisheries Management	WMAN 445. Introduction to Fisheries Management. 3 Hr. PR: WMAN 224 or consent. Basic principles of management of fishery resources, with an emphasis on
		,	freshwater stocks. Includes current environmental and management issues, concepts, and methods used in management of commercial and recreational fisheries.
I			
WMAN	446	Freshwater Ecology	WMAN 446. Freshwater Ecology. 4 Hr. PR: (BIOL 101 and BIOL 102 and BIOL 103 and BIOL 104) or BIOL 115 or WMAN 224 or consent. Physical, chemical, and
		J	biological characteristics of inland waters with emphasis on the structure and function of stream ecosystems.
			10.0.00 p.co. on a coconstant of mindre waters with emphasis on the structure and function of stream ecosystems.

Subject	Course	Course Title	Course Text
WMAN	449	Stream Ecosystem Assessment	WMAN 449. Stream Ecosystem Assessment. 3 Hr. Self-paced lectures and exercises culminating in a one-week trip to the mountains of West Virginia for hands-on
			study of stream fishes, invertebrates, water and habitat quality, geomorphology, and ecology.
WMAN	536	Ecology/Mangmnt Wetland Wildlf	WMAN 536. Ecology and Management of Wetland Wildlife. 4 Hr. PR: Consent. Ecology and management of waterfowl and wetland fur bears with emphasis on
			recent research and management literature.
WMAN	550	Fish Ecology	WMAN 550. Fish Ecology. 3 Hr. PR: WMAN 445. Study of the interrelations between fish and the biotic and abiotic environment and the influence of these
			interactions upon fisheries. Includes trophic dynamics, reproductive ecology, predatory-prey interactions, and anthropogenic factors.
WMAN	641	Aquatic Toxicology	WMAN 641. Aquatic Toxicology. 3 Hr. Class will cover toxicity testing, the environmental fate of contaminants and toxicological assessment. The class will
			emphasize fish toxicity.
WMAN	693	SPTP:Environmental Genomics	WMAN 693. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
WMAN	6930	SPTP:Climate Change/Ecol Systm	WMAN 6930. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.
WMAN	693U	SPTP:GIS Watershed Anlyss/Mdlg	WMAN 693U. Special Topics. 1-6 Hr. A study of contemporary topics selected from recent developments in the field.

March   Marc		T	To a second	Websites								
March   Marc	Obs	State	University	Websites	Administrative Office		Year Declaring Carbon Neutrality	CarbonNeutralYear	Some Sustain Policy	ACUPCC	* Signature	
March   Marc	1	Alabama	Alabama A&M University (HBCU)	https://www.aamu.edu/								
Part				http://wp.guhum.edu/gustainghility/wp-	Auburn University Office of Sustainability12/19/2019	In 2010, over 150 Stakeholders created						
March   Marc				content/uploads/2019/11/AU_CAP_v1.1.	http://wp.auburn.edu/sustainability/practice	Auburn University's Climate Action Plan	Declares "Climate Neutrality" by 2050 (Decleared					
	2	Georgia		pdf	s/policies-plans/		this in 2010)	2050	Υ			
March   Marc			ruskegee Oniversity (HBCO)	https://uaf.edu/mastplan/files/other-	University of Alaska Fairbanks Office of	The University's 2015 Sustainability Plan						
				campus-mp/SustainabiltyPlan-UAF-	Sustainability:	sets a goal to achieve a 25% carbon						
Part	4	Alaska	University of Alaska, Fairbanks	https://sustainabilitymap.arizona.edu/acti		tootprint reduction by 2025.	25% reduction in carbon footprint by 2025		Y			
A Description   Property of the Company				vities/7260/reducing-cost-energy-and-								
March   Marc		Adama	Hairmanitu of Arizona	space-consumption-for-biological-sample- storage	https://directory.arizona.edu/office-	Padusa sarban amissians	an data directly stated		v	4/6/2007	10/5/2015	
March   Marc	J	Alizona	University of Artzona	Storage	Sustainability	Address emission issues from University-	no date directly stated		,	4/0/2007	10/3/2013	
Table				hate a contract of the contract of the state for d		direct sources, university electricity	The contract of the state of th					
Automation   Company   C	6	Arkansas	University of Arkansas	ex.php	Sustainability	sources	by 2040	2040	Y			
March   Marc				https://www.ucop.edu/sustainability/policy	Hairossitu of California Office of the	The Heisessits breaks down three seepes	Conno 1 9 3: Achieus poutralite les 2035. All throno					
Second	7	California	University of California	energy/index.html	President, Sustainability	for climate neutrality.	scopes by 2050 or sooner.	2050	Y			
The state   Company   Co						Sustainability Strategic Plan,						
					Colorado State University, State of	50/2016/10/CSU-Sustainability-Strategic-	climate neutrality by 2050, 75% reduction in					
	8	Colorado	Colorado State Univeristy	https://green.colostate.edu/	Sustainability	Plan-oct-27 ndf	greenhouse gas emissions by 2030	2050	Y			
						content/uploads/sites/2041/2017/01/De						
Company   Comp	0	Connecticut	Hairmanitural Connections	https://usepp.odu/		velopment-Sustainability-Framework-	Corbon noutrality by 2050	2050	v			
1   1   1   1   1   1   1   1   1   1	9	Confecticut	Conversity of Connecticut	mpostockiii.euur	Josephine	- mir.pui	Condonnectionity by 2030	2050				
1   1   1   1   1   1   1   1   1   1						2011- First state entity in President						
1   March   10	40	Delawara	Dalawara State Heimerita (MRCII)	https://www.docu.odu/		Barack Obama's Better Biulding	No date stated, but the University is working to			2011		
1 - Standard	10	Delawarê		mupoJ/www.desu.edW		https://sites.udel.edu/green/?page_id				2011		
March   Marc	11			https://www.udel.edu/	UD Green Liaisons	=165	cut emissions by 20% by the year 2020		Y			
March   Marc	12	District of Columb	university of the District of Columbia	mups://www.uac.eau/		Forever Forward Strategic Plan,			1			
1   March   1						Sustainabilty Action Plan						
1						https://www.famu.edu/BOT/FAMU%20F orever%20Forward%20Strategic%20Plan	Pursuing net zero greenhouse gas emissions by					
1	13	Florida	Florida A&M University (HBCU)		The Sustainability Institute	pdf	2050	2050	Y			
1	14	Florida	University of Florida	https://sustainable.ufl.edu/	Office of Sustainabilty	Climate Action Plan	Goal of Carbon Neutrality by 2025		Y	2006		_
Company	15	Georgia	Fort Valley State University (HBCU)	https://www.fvsu.edu/		policy stated/published carbon						
Second   S	-					Compus Climato Actico Dica						
The property of the control of the c						https://climateandsociety.uga.edu/cli						
The property of the control of the c	16	Georgia	University of Georgia	https://www.uga.edu/	Office of Sustainability	mate-action-uga/uga-carbon-footprint/	Does not directly state plan of action		Y			
1 Service of the control of the cont						Strategic Plan (Para Hulo, Ever Upward) https://www.upg.edu/parahulo/mission-						
1 Mary Processor of Processor Communication	17	Guam		https://www.uog.edu/		vision-values	specified					
	18	Hawaii	University of Hawaii	https://www.hawaii.edu/	Office of Sustainability	https://www.hawaii.edu/sustainability/	Not Specified					
March   Marc						Climate Action Plan						
Part						https://www.uidaho.edu/-						
Company of Land   Company of												
1   March   1						CLIMATE-ACTION-PLAN-JAN-15-						
Company of the comp	10	Idaha	Hairmanitu of Idaha	https://www.uidaho.odu/	Office of Custoin shills.	2010.pdf?la=en&hash=495AA29B3CDFE8	the 2010 Climate Action Plan aims for Climate	2020		March 2007		
Company of the comp				https://www.didaro.edu/	Institute for Sustainability, Energy, and	IDCZADO3B4A340ZU3ZA4EDE3Z3	Carbon Neutrality as soon as possible and no later	2030				
Sept. (Appendix Sept. (Appendi	20	Illinois	University of Illinois	https://illinois.edu/index.html	Environment	Illinois Climate Action Plan (iCAP)	than 2050	2050	Υ	2008		
## Professional Control Contro												
## Anthon Workshop Company of Contamination of Contaminat						https://www.purdue.edu/sustainability/						
Part	21	Indiana	Purdue University	https://www.purdue.adu/sustainahilitu/	Campus Planning and Sustainability	documents/sustainability_strategicplan.p			ν			
The state of the control of the cont		mound	Turduc officeraty	mpon www.purduc.com outstanding.	Cumpost annual and sustainability		No date given for carbon neutrality. A 2010 goal					
22 I sense of the control of the con						Energy and Climate	states that the university is aiming to meet the					
April   Company   Compan	22	lowa	Iowa State University	https://www.livegreen.iastate.edu/	Office of Sustainability	us-initiatives/energy-climate			Y			
Section (Application Continue)  Section (Application Continue)						Sustainability Strategic Action Plan						
Scale Season Communication of Communication						nttps://www.k- state.edu/2025/documents/2025-	A 2014 Goal aims for an 80% reduction to the University operation's carbon footprint levels					
24 Kentucky Sentucky Stem University (MEU) Sentucky Sentucky Stem University of Kentucky University of Manage University						Sustainability-Strategic-Action-Plan-	(those benchmarks recorded for the year 2005) by					
State-billing Variage Ren State-billing Variage Ren State-billing Variage Ren State Developer of Americal State Developer of American State De	23	Kansas	Kansas State University	https://www.k-state.edu/sustainability/	Office of Sustainability	FINAL-8-21-14.pdf	the year 2050.		Y			
Part	24	nemucký	nameday state university (HBCU)	- mpo-//kyou.euw		Sutainability Strategic Plan	to coury outside or educational instruction					
Secretarially University of Enthicity State University (Manuel State Un						https://www.uky.edu/sustainability/sites						
Estetated the continue of the						OSustainability%20Strategic%20Plan v 2 2	25% reduction from 2010 greenhouse gas					
26 Logislans Southern University (HBCU) stop interest universi	25	Kentucky	University of Kentucky	https://www.ukv.edu/sustainability/	Office of Sustainability	6.2019_0.pdf	emission levels by 2025		Y			
26 Logislans Southern University (HBCU) stop interest universi				https://www.lsu.edu/ouetoinahilitu/indox.o.		Campus Master Plan (2017) https://www.ku.edu/ode/files/2017 km	Campus goals are focused on increasing energy					
27 Legislana Southern University (IRSCU) 100 process part and/or 100 process p	26	Louisiana	Louisiana State University	<u>пр</u>	LSU Campus Sustainability	_master_plan.pdf	specified for carbon neutrality		Y			
28 Maine University of Maine https://umains.edu/sustainability Office of Sustainability of Sustainabil	27			http://www.suhr.edu/			No mention of a carbon policy or sustainability		N			
Assachusetts University of Massachusetts Institute of Technology Office of Sustainability of Massachusetts Institute of Technology Office of Sustainability of Massachusetts University of Massachusetts  31 Massachusetts  42 Markjan  43 Michigan  44 Michigan  45 Michigan  46 Michigan  46 Michigan  46 Michigan  46 Michigan  46 Michigan  46 Michigan  47 Michigan  46 Michigan  46 Michigan  47 Michigan  47 Michigan  48 Mich	27	Louisianá	Southern University (HBCU)	anap.n/www.subr.edu/			within the campus master plan		N .			
All Marke University of Maine University of Market Univer												
25 Marke University of Maine University of Marke State University of Management of Market State University of Management of Mana						content/uploads/sites/195/2010/04/UM	Emissions reductions from 2005 levels: 30%					
29 Maryland University of Manyland University	20	Maine		https://umaine.edu/sustainability/	Office of Sustainability	aine report 150dpi.pdf	reduction by 2030, 80% recuction by 2050		Y	February, 2007	Yes	
Climate Action Plan https://www.uml.edu/usersline/by workspace and plants and plantspace and pla	20		University of Maine				From 2005 levels, the University cut its net					
20 Maryland University of Maryland University of Maryland University of Maryland University of Massachusetts Institute of Technology Institutional University of Massachusetts Institute of Technology Institution of University of Massachusetts Institute of Technology Institution of University of Massachusetts Institute of Technology Institutional Institution of Technology Institution Instituti	20		University of Maine									
Massachusetts Massachusetts institute of Technology Massachusetts Massachusetts institute of Technology Massachusetts Massachuse	20		University of Maine			Climate Action Plan	earlier than the goal detailed in their Climate					
Massachusetts Massachusetts institute of Technology Massachusetts Massachusetts institute of Technology Massachusetts Massachuse		Maryland		https://sustainahility.umd.edu/.	Office of Sustainability		earlier than the goal detailed in their Climate Action Plan, Aims for carbon neutrality by	2050	Y	2007		
Climate Commitment & Action Plan https://www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability/ antipc.//www.uml.edu/usurstanability www.add/usurstanability www.add		Maryland		https://sustainability.umd.edu/	Office of Sustainability		earlier than the goal detailed in their Climate Action Plan, Aims for carbon neutrality by	2050	Y	2007		
31 Massachusetts University of Massachusetts Office of Sustainability Action-Planifedebut aspec Achieve climate in endurally by 2000 2000 Y 2007 Climate Action Plan (Indicate A	29		University of Maryland	https://sustainability.umd.edu/		s/climate-action-plan Plan for Action on Climate Change https://climate.mit.edu/users/mit-	earlier than the goal detailed in their Climate Action Plan, Aims for carbon neutrality by 2050 Reduce greenhouse gas emissions by 32% by 2030 from 2016 values, and achieve	2050	Y Y	2007		
31 Massachusetts University of Massachusetts Office of Sustainability Action-Planifedebut aspec Achieve climate in endurally by 2000 2000 Y 2007 Climate Action Plan (Indicate A	29		University of Maryland	https://sustainability.umd.edu/ https://sustainability.mit.edu/		s/climate-action-plan Plan for Action on Climate Change https://climate.mit.edu/users/mit- climate-action Climate Commitment & Action Plan	earlier than the goal detailed in their Climate Action Plan, Aims for carbon neutrality by 2050 Reduce greenhouse gas emissions by 32% by 2030 from 2016 values, and achieve	2050	Y Y	2007		
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33 Minnesota University https://usatanability.msus.edu/ Office of Sustainability discover-C-wh-Girmate-scripts and Sustainability office of Sustainability discover-C-wh-Girmate-scripts and Sustainability office of Sustainability	29	Massachusetts	University of Manyland  Massachusetts Institute of Technology	https://sustainability.umd.edu/ https://sustainability.mit.edu/ https://sustainability.mit.edu/	Office of Sustainability	s/climate-action-plan Plan for Action on Climate Change https://climate.mit.edu/users/mit- climate-action Climate Commitment & Action Plan https://www.uml.edu/sustainability/Pla nning/Climate-Commitment-and-	sarlier than the goal detailed in their Climate Action Plan, Aims for carbon neutrality by 2050 Reduce greenhouse gas emissions by 32% by 2030 from 2016 values, and achieve carbon neutrality as soon as possible	2050	Y Y			
S3 Minnesota University of Min	29	Massachusetts	University of Manyland  Massachusetts Institute of Technology	http://sustainability.umd.adu/ https://sustainability.mit.edu/ https://sustainability.mit.edu/	Office of Sustainability	s/climate-action-plan Plan for Action on Climate Change https://climate.mit.edu/users/mit- climate-action Climate Commitment & Action Plan https://www.umi-edu/usustainability/Pla nning/Climate-Commitment-and- Action-Plan/default.aspx Climate Action Plan Gimate Action Plan	earlier than the goal detailed in their Climate Action Plan, Alms for carbon neutrality by 2050 Reduce greenhouse gas emissions by 32% by 2030 from 2016 values, and achieve carbon neutrality as soon as possible Achieve climate neutrality by 2050	2050	Y Y			
34 Mississippi Alcom State University (HBCU) Not addressed outside classroom instruction Climate Action Plan https://www.opdca.msstate.edu/files/ca	30	Massachusetts  Massachusetts	University of Manyland  Massachusetts Institute of Technology  University of Massachusetts	nttps://sustainability.urmd.edu/ https://sustainability.milt.edu/ https://sustainability.milt.edu/ https://sustainability.msus.edu/	Office of Sustainability  Office of Sustainability	s/climate-action-plan Plan for Action on Climate Change https://climate.mit.edu/users/mit- climate-action Climate Commitment & Action Plan https://www.uml.edu/usustainabilityPla nning/Climate-Commitment-an- Action-Plan/default aspx https://sustainability.msu.edu/dscover- https://sustai	earlier than the goad datalled in their Climate Action Plan, Alms for carbon neutrality by 2050 Reduce greenhouse gas emissions by 32% by 2050 from 2016 values, and achieve carbon neutrality as soon as possible Achieve climate neutrality by 2050 Reduce greenhouse gas emissions by 45% by 2000, no dates etc crabon neutral	205(	Y Y Y	2007		
Glimate Action Plan https://www.opdca.msstate.edu/files/ca	29 30 31	Massachusetts  Massachusetts  Michigan	University of Maryland  Massachusetts Institute of Technology  University of Massachusetts  Michigan State University	https://eustainability.umd.edu/ https://eustainability.mit.edu/ https://euseu.umi.edu/eustainability/ https://euseu.umi.edu/eustainability/ https://euseu.umi.edu/eustainability/	Office of Sustainability  Office of Sustainability  Office of Sustainability	s/climate-action-plan Plan for Action on Oilmate Change https://climate.mit.edu/users/mit- climate-action Climate Action Plan https://www.uml.edu/usustainability/Plan nning/Climate-Commitment-and- Action-Plan idebuit aspx Climate Action Plan https://www.tainability.msu.edu/discover/ discover-C-wh-climate-action.html Sustainability-wappage "It all Adds Up"	earlier than the goad detailed in their Climate Action Plan, Alms for cultion neutrality by 2050. Reduce greenhouse gas emissions by 32% by 2030 from 2016 values, and achieve carbon neutrality as soon as presible.  Actieve Climate soon as presible.  Actieve Climate neutrality by 2050. Reduce greenhouse gas emissions by 45% by 2000, no date set for carbon neutral.  Cut emissions in shift y 2021, and the curbon.		Y Y	2007 Yes		
25 Massidgel Massidgel State University (https://www.apda.msstate.edu/files/car p. plane / Plans to be carbon mentral by 2042 2009	29 30 31	Massachusetts  Massachusetts  Michigan	University of Mandand  Massachusetts Institute of Technology  University of Massachusetts  Michigan State University  University of Minercots	https://sustainability.umd.edu/ https://sustainability.mit.edu/ https://sustainability/ https://sustainability/ https://sustainability.mes.edu/ https://sustainability.mes.edu/	Office of Sustainability  Office of Sustainability  Office of Sustainability	s/climate-action-plan Plan for Action on Oilmate Change https://climate.mit.edu/users/mit- climate-action Climate Action Plan https://www.uml.edu/usustainability/Plan nning/Climate-Commitment-and- Action-Plan idebuit aspx Climate Action Plan https://www.tainability.msu.edu/discover/ discover-C-wh-climate-action.html Sustainability-wappage "It all Adds Up"	earlier than the goad datalled in their Climate Action Plan, Allin St carbon neutrality by 2000. 2001. 2002. 2003. 2004. 2005.		Y Y Y Y	2007 Yes	2015	
V Interception Intercept on the Control of Intercept on Int	29 30 31	Massachusetts Massachusetts Michigan	University of Mandand  Massachusetts Institute of Technology  University of Massachusetts  Michigan State University  University of Minercots	https://sustainability.umd.edu/ https://sustainability.mit.edu/ https://sustainability/ https://sustainability/ https://sustainability/ https://sustainability.mss.edu/ https://sustainability.mss.edu/	Office of Sustainability  Office of Sustainability  Office of Sustainability	acclimate action-plan relation on Climate Change https://climate.mit.edu/users/mit- climate.exclore. Climate or Committee of Action Plan Climate Commitment & Action Plan https://www.mitchedu/users/m	earlier than the goad datalled in their Climate Action Plan, Allin St carbon neutrality by 2000. 2001. 2002. 2003. 2004. 2005.		Y Y Y	2007 Yes	2015	
SU IMISSION CHICAGO CHISCOCKY (INC.) (INSPECTION COLUMN CO	29 30 31 32 33 34	Massachusetts  Massachusetts  Michigan  Minnesota  Mississippi	University of Maryland  Massachusetts Institute of Technology  University of Massachusetts  Michigan State University  University of Minnesota Alkom State University (HIGCU)		Office of Sustainability	sclemate action-plan or Charge https://cimate.ma.chu.plan.to/action on Climate Change https://cimate.ma.deulusensimi Charge Commission of Charge Charge Commission Commission Commission Commission Commission Commission Commission Commission Charge Charg	earlier than the goad detailed in their Climate Action Plan, Alms for carbon neutrality by 2059. Reduce greenhouse gas emissions by 32% by 2050 from 2016 values, and achieve carbon neutrality as soon as possible action neutrality as soon as possible. Achieve climate neutrality by 2050. Reduce greenhouse gas emissions by 45% by 2050, no date set for carbon neutral Cut emissions in half by 2022, and be carbon neutral by 2050. Detail of the carbon neutral Cut emissions in half by 2022, and be carbon neutral by 2050. Detail of the carbon neutral Cut emissions in half by 2022, and be carbon neutral by 2050. Detail of the carbon neutral cut emissions in half by 2022, and be carbon neutral by 2050. Detail of the carbon neutral cut emissions in half by 2022, and be carbon neutral by 2050.		Y Y Y Y	2007 Yes 2008	2015	

1		Ten a se	Websites	Administrative Office			CarbonNeutralYear				
Obs	State	University	Websites	Administrative Office	2016 Master Plan, Leaders in	Year Declaring Carbon Neutrality	CarbonNeutralYear	Some Sustain Policy	ACUPCO	* Signature	
					Stewardship & Climate Action Plan						
					https://masterplan.missouri.edu/wp- content/uploads/sites/10/2018/08/2017						
37	Missouri	University of Missouri	https://sustainability.missouri.edu/	Sustainability Office	annual report web.pdf	Aims to achieve carbon neutrality by 2050 Aiming for a 20% reduction from 2009 levels by 2025	2050	Y			
38	Montana	Montana State University-Bozeman	http://www.montana.edu/sustainability/	Office of Sustainability	2011 Climate Action Plan	2025		Y	2009		
	Nebraska	University of Nebraska	https://sustainability.unl.edu/	Office of Sustainability	https://sustainability.unl.edu/greenho use-gas-emissions	Adresses greenhouse gas emissions but does not have a set date or detailed plan		Y			
40	Nevada New Mamashira	University of Nevada, Reno University of New Hampshire	https://www.unr.edu/nvis	Nevada Institute for Sustainability	https://sustainableunh.unh.edu/sites/su	Does not directly state plan of action		v	February, 2007		
42	New Jersey	Rutgers- the State University of New Jersey	https://sustainability.rutgers.edu/	Sustainability Institute University Committee for Sustainability		Does not directly state plan of action			reditally, 2007		
					Climate Action Plan https://sustainability.nmsu.edu/climate-						
43	New Mexico	New Mexico State University	https://sustainability.nmsu.edu/	Sustainability at NMSU	action-plan/ Commitment to Campus Sustainability	Site is being updated					
					https://sustainability.comell.edu/assets/						
44	New York	Cornell University	https://sustainability.comell.edu/	Sustainability	doc/Cornell's%20Committment%20to%2 0Sustainability.pdf	Aims for carbon neutrality and full renewable energy by 2035	2035	Y			
45	North Carolina	North Carolina A&T State University (HBCU) North Carolina State University	https://www.ncat.edu/index.php			Does not directly state plan of action					
			https://www.ndsu.edu/staff_senate/enviro	University Sustainability Office	https://sustainability.ncsu.edu/wp-	by 25% from the 2008 baseline between 2017 and		Y.			
47	North Dakota	North Dakota State University	nmental sustainability/	Environmental Sustainability Committee	None	Not specified.					
			https://www.osu.edu/initiatives/sustainabil		https://fod.osu.edu/sites/default/files/o						
48	Ohio	Ohio State Univeristy	ity/	Sustainability at Ohio State	hio state climate action plan.pdf	Carbon neutrality by 2050	2050	Y	2008		
49	Oklahoma	Langston University (HBCU)				Not specified.					
50		Oklahoma State University	stainability/operations.html			Not specified.					
						Carbon neutrality by 2025 according to					
51	Oregon	Oregon State University	https://fa.oregonstate.edu/sustainability/	Sustainability at OSU	http://reporting.secondnature.org/	secondnature.org	2025	Y	Apr. 13, 2007		
52	Pennsylvania	Pennsylvania State University	https://sustainability.psu.edu/	Sustainability Institute	action	gas emissions by 32% since 2005. The current goal is 35% by 2020.		Y			
53	Puerto Rico	University of Puerto Rico				Not specified.					
54	Rhode Island	University of Rhode Island	https://web.uri.edu/sustainability/	Sustainability @ URI	http://reporting.secondnature.org/med	Climate neutrality target year: 2065	2065	Y	Jan. 11, 2007		
						"The ultimate goal of the Sustainability Action Plan					
						and the Clemson University Commission on					
55	South Carolina	Clemson University	http://www.clemson.edu/sustainability/	Sustainability	nttp://www.ciemson.edu/sustainability/ net-zero.html	Sustainability is to make the University carbon neutral by the year 2030"	2030	Y	Apr. 25, 2007		
56 57	South Dakota	South Carolina State University (HBCU) South Dakota State University	https://www.sdstate.edu/sustainability			Not specified. Not specified.					
-											
58	Tennessee	Tennessee State University (HBCU)	http://www.tnstate.edu/sustainabilitypgm/	Sustainability Department		Not specified.					
					http://sustainability.utk.edu/wp-						
					content/uploads/sites/69/2019/05/483 852-Environmental-Impact-Report-						
59	Tennessee Texas	University of Tennessee Prairie View A&M University (HBCU)	https://sustainability.utk.edu/	Office of Sustainability	vFINALspreads.pdf	Climate neutrality by 2061 Not specified.	2061 specified	Y	Dec. 20, 2006		
61	Texas	Texas A&M University	http://sustainabilitv.tamu.edu/	Office of Sustainability	es/1/downloads/2018SMP.PDF	campus user by 2050	specified 2050	Y			
					http://www.sustainability.usu.edu/sust						
62	Utah	Utah State University	http://www.sustainability.usu.edu/	Sustainability at USU	ainability-council/GHGcommittee	Carbon neutrality by 2050	2050	Y	Jan. 22, 2007		
63	Vermont	University of Vermont	https://www.uvm.edu/sustain/sustainabilit y-uvm/climate-action-plan	Office of Sustainability	ault/files/uvm_climate_action_plan_su mmary_presentation_20171106.pdf	Climate neutrality by 2025	2025	Y	23-May-07		
64	Virgin Islands	University of the Virgin Islands				Not specified. No word on carbon nuetrainty out they have	specified				
	Virginia	Virginia Polytechnic Institute & State University	https://www.facilities.vt.edu/sustainability.	Office of Sustainability	https://www.facilities.vt.edu/sustainabi	committed to reducing carbon dioxide emissions by 80 percent below 1990 levels by 2050.		Y			
05	gma	Polytechnic institute & State University		OTTICE OF SUSCIMBURING	A CONTRACTOR OF THE PARTY OF TH	, an particular about 15.50 levels by 2030.					
66		Virginia State University (HBCU)				Not specified.	specified				
			https://example.com/	WSU Pullman and Statewide Research and	384/2017/07/WSU-Pullman-	57.5% reduction of 2005 levels by 2050					
67	Washington	Washington State University	mttps://sustainability.wsu.edu/	Extension Centers/Units	research and Extension CAM-signed-	57.5% reduction of 2005 levels by 2050					
68		West Virginia University	https://sustainability.wvu.edu/	Sustainability @ WVU		Not specified.	specified				
69		West Virginia State College (HBCU)				Not specified.	specified				
						In Nov. 2019 they announced they were signing					
					h	the second nature resilience commitment which					
70	Wisconsin	University of Wisconsin- Madison	https://sustainability.wisc.edu/	Office of Sustainability	https://sustainability.wisc.edu/uw- madison-signs-resilience-commitment/	requires a climate action plan be put in place but there is no offical link to that thus far.		Y		Nov. 14, 2019	
					http://www.uwyo.edu/sustainability/_fil						
74	Wyoming	University of Wyoming	http://www.uwwp.edu/sustainahility/	Campus Sustainability Committee	http://www.uwyo.edu/sustainability/_fil es/documents/climate_action_plan_0 9152009%20final.pdf	Carbon neutrality by 2050	2050	v			
/1	wyoming	University of Wyoming	mtp.//www.uwyo.edu/sustamability/	campus sustainability Committee	g-102000/020IIIa.pui	Carbon neutrality by 2050	2050				
	(ACUPCC) Americ	an College and University President's Climate Com	mitment								
	(HBCU) Historicall	y Black College/University									

# **Terms**

carbon
carbon neutral
carbon emissions
emissions
sustainability
sustainability plan
climate
climate plan
office of sustainability
climate action plan
climate neutral

Site with a lot of information regarding Universities and their carbon policies:

http://reporting.secondnature.org/

State	CarbonNeutralYear S	Some Carbon Policy		
Georgia	2050	Y		
Alaska		Y		
Arizona	,	Y		
Arkansas	2040	Y		
California	2050			
Colorado	2050		Row Labels	Count of CarbonNeutralYear
Connecticut	2050 \		2025	
Deleware		Y	2030	2 2 1
District of Columbia	,	Y	2035	1
Florida	2050	Y	2040	1
Florida		Y	2042	1
Georgia	,	Y	2050	14
Idaho	2030	Y	2061	1
Illinois	2050	Y	2065	1
Indiana		Y	(blank)	
lowa	,	Y	<b>Grand Total</b>	23
Kansas	,	Y		
Kentucky	,	Y		
Louisiana	,	Y		
Louisiana	1	N	Carbon Neutral	Number of Land Grants
Maine	,	Y	Now - 2035	5
Maryland	2050	Y	2036-2050	17
Massachusetts		Y	2051-2065	2
Massachusetts	2050	Y		
Michigan		Y		
Minnesota	2050	Y		
Mississippi	2042 \	Y		
Missouri	2050			
Montana		Y		
Nebraska	,	Y		
New Hampshire	\	Y		
New York	2035	Y		
North Carolina		Y		
Ohio	2050	Y		
Oregon	2025			
Pennsylvania		Y		
Rhode Island	2065	Y		
South Carolina	2030 \			
Tennessee	2061			
Texas	2050			
Utah	2050			
Vermont	2025			
Virginia		Υ		
Washington		Υ		
Wisconsin		· Y		
Wyoming	2050	· Y		
rryoning	2000	1		

# WVU Faculty Senate Teaching Assessment Committee (TACo) Annual Report 2019-2020

#### **Committee Members:**

Voting Members:

Ashlee Sowards, Chair

Jessica Vanderhoff (chair-elect)

Donna Ballard Ilkin Bilgesu Kimberly Floyd Gretchen Garofoli Shawn Grushecky Ashley Martucci Catherine Mezera Toni Morris

Nathalie Singh-Corcoran

Rachel Stein Leslie Tower

Yogen Panta

Non-Voting Members:

Robert Hastings
Kathy Fletcher
David Hauser
Vicki Huffman
Lena Maynor
Sean McGowan
Brian Meredith
Lou Slimak

Robynn Shannon

Erin Kelley

Travis Rawson (student representative)

# **Committee Charge:**

The Teaching and Assessment Committee is charged with:

- Overseeing the electronic student evaluation of instruction (eSEI), conducting analysis of the resulting data, and making recommendations to the university community based upon those analyses;
- Reviewing section syllabi in support of faculty professional development, harmonized courses, and program review;
- Initiating and making recommendations for documentation of teaching effectiveness;
- Making recommendations to the Teaching Learning Commons as to faculty needs related to instructional and assessment processes
- Collaborating with the General Education Foundations Committee, the Senate Curriculum Committee, the Assessment Council, and the Graduate Council to recommend practices for course and curricula assessment methods;
- Addressing in a timely fashion other issues pertinent to Teaching and Assessment.

#### Goals for 2019-2020 Academic Year from Previous Committee:

As the course review was a pilot process, there will be some revisions of the process for 2019- 2020. In summer 2019, we plan to develop the portal for reporting unprofessional SEIs in partnership with Student Conduct. This will need to pass through Executive Committee and the Faculty Senate. The unprofessional SEI reporting workflow will need to be finalized. This has already been reviewed at the Provost Office. It will also need to move through the Executive Committee and then Faculty Senate. The SEI letters/emails that faculty and students receive will need to be revisited. Finally, it is recommended that TACO look at other SEI tools.

# **2019-2020 Meeting Dates:**

September 5, 2019 October 3, 2019 November 7, 2019 January 9, 2020 February 6, 2020 March 5, 2020 April 2, 2020 (virtual meeting) May 14, 2020 (virtual meeting)

# TACo's Accomplishments for the 2019-2020 academic year:

- Finalized workflow of reporting eSEIs to the Office of Student Conduct that violated Student Conduct Code
- Modified language appearing to both students and faculty in emails regarding eSEIs
- Began a collaboration with the Curriculum Committee to assist with syllabus format/information
- Explored other options to the traditional eSEI format process is ongoing
- Approved to begin move of syllabi to repository
- Suggested faculty provide survey to students after transition to remote learning to gauge atmosphere
- Created "Midterm Assessment Working Group" to design tool for gathering teaching assessment data earlier in semester which would allow for faculty to make appropriate changes to enhance student learning. The work of this subcommittee is ongoing.
- Voted in favor of removing the option of assigning +/- grades in STAR
- Suggested need for altering summer SEIs due to remote learning ongoing

## Goals for 2020-2021 Academic Year:

- Finalize any necessary alterations to eSEIs distributed in Summer 2020
- Complete adoption of Midterm Assessments and pilot to sample courses/faculty
- Review and analyze reports of eSEIs that violated Student Conduct Code revise if needed