UNIVERSITY COUNCIL MEETING September 16, 2019 3:30 p.m. Steger Hall Conference Center AGENDA

1.	Adoption of Agenda	Cyril Clarke
2.	Announcement of approval and posting of minutes of May 7, 2018	Cyril Clarke
	These minutes have been voted on electronically and will be posted on the University web.	
3.	Reports from Commission Chairs	Cyril Clarke
	 Commission Chair Briefings Commission on Administrative and Professional Faculty Affairs Commission on Equal Opportunity and Diversity Commission on Faculty Affairs Commission on Graduate Studies and Policies Commission on Outreach and International Affairs Commission on Staff Policies and Affairs Commission on Student Affairs Commission on Undergraduate Studies and Policies Commission on Undergraduate Studies and Policies Commission on Undergraduate Studies and Policies Commission on University Support 	Janice Austin Kimberley Homer Bob Hicok John Hole Urs Buehlmann Alan Michaels Tamarah Smith John Livingston Kerry Redican Jonathan Bradley
4.	Announcement of acceptance and posting of Commission Minutes These minutes have been accepted for filing by electronic vote and will be posted on the University web. Note that the purpose of voting on Commission minutes is to accept them for filing. University Council By-laws require that policy items be brought forward in resolution form for University Council action. Commission on Administrative and Professional Faculty Affairs April 10, 2019	Cyril Clarke
	May 8, 2019 Commission on Equal Opportunity and Diversity April 29, 2019	
	Commission on Faculty Affairs April 19, 2019	
	Commission on Graduate Studies and Policies April 17, 2019	
	Commission on Outreach and International Affairs April 18, 2019	
	Commission on Research December 12, 2018 February 13, 2019 March 13, 2019	
	Commission on Undergraduate Studies and Policies <u>April 8, 2019</u> <u>April 22, 2019</u>	
5.	Presentation Commonwealth of Virginia Campaign Overview	Ed Lener Dawn Jefferies

University Council Minutes May 6, 2019 3:00 PM 1045 Pamplin Hall

Present: Tim Sands (presiding), Rosemary Blieszner, Richard Blythe, Jack Finney for Cyril Clarke, Greg Daniel, Karen DePauw, Dani McNeil for Bryan Garey, Susan Short for Guru Ghosh, Said Mostaghimi for Alan Grant, Scott Midkiff, Sally Morton, April Myers, Lisa Royal for Kim O'Rourke, Patty Perillo, Julie Farmer for Charles Phlegar, Dwayne Pinkney, Julia Ross, Dwight Shelton, Robert Sumichrast, Kim Akers for Lisa Wilkes, Kayla Smith for Sherwood Wilson, Keith Goyne for Paul Winistorfer, Rajesh Bagchi, Jonathan Bradley, Urs Buehlmann, Bob Hicok, Kimberley Homer, Mary Kasarda, Monika Lawless, John Livingston, Robert Sebek for Tammie Smith, Monty Abbas, Susan Anderson, Eric Kaufman, Bettina Koch, Cayce Myers, David Tegarden, Lynn Abbott, David Bieri, Mary Marchant, Christopher Zobel, Velva Groover, Teresa Lyons, Lori Buchanan for Sue Teel, Annette Bailey, Kayla Winbush for Jaylen Foskey, John Massey, Glenda Scales, Christine Tysor, David Case for Jacob Davis, Zo Amani, John Ferris, & Rachel Iwicki

Absent: Michael Friedlander, Dan Harrington, Theresa Mayer, Steve McKnight, Kelly Oaks, Menah Pratt-Clarke, Tyler Walters, Virginia Pannabecker, Matthew Gabriele (with notice), Jia-Qiang He (with notice), Yan Jiao, Chris Lawrence, LaTawnya Burleson, Brian Huddleston, Katrina Loan, Erin Poff, Jeannie Layton-Dudding, Davon Woodard, Samantha Fried, Alexis Hruby, Anurag Mantha, Conrad Briles, Caed Cunningham, Sam Felber, Adil Sageer, & Madilynne Tanner

Guests: Nicole Abaid, Scott Case, Kiri DeBose, Kira Dietz, Justin Dubik, Stefan Duma, Tara Frank, Ron Fricker, Lindsey Gleason, Luisa Havens Gerardo, John Hole, Rachel Holloway, Bill Huckle, John Lesko, James Lord, Ennis McCrery, Shane Ross, Brandy Salmon, Jake Socha, Rick Sparks, Laurie Stacey, Kristie Verniel, & Nick Woods

Dr. Timothy Sands called the meeting to order at 3:00 p.m. A quorum was present.

1. Adoption of Agenda

A motion was made and seconded to adopt the agenda. The motion carried.

2. Announcement

Dr. Sands recognized Mr. Dwight Shelton, Vice President for Finance and Chief Financial Officer, for his many contributions to the university over the past four decades. Mr. Shelton will be officially retiring on November 30, 2019.

3. Announcement of approval and posting of minutes of April 22, 2019

Dr. Sands noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (http://www.governance.vt.edu).

4. Old Business

Commission on Student Affairs

Resolution CSA 2018-19C

Addition of a Statement on Sanction Enhancements for Policy Violations Motivated by Bias for the Student Code of Conduct (Changes to the Hokie Handbook <u>www.hokiehandbook.vt.edu</u>)

Ms. Ennis McCrery presented the resolution for second reading. A motion was made to approve the resolution. The motion was seconded, and the motion passed.

Commission on Student Affairs

Resolution CSA 2018-19D Resolution to Change the Student Code of Conduct Section on Weapons (Changes to the Hokie Handbook <u>www.hokiehandbook.vt.edu</u>)

Ms. Ennis McCrery presented the resolution for second reading. A motion was made to approve the resolution. The motion was seconded, and the motion passed.

Commission on Undergraduate Studies and Policies

Resolution CUSP 2018-19B Resolution to Approve New Major, Humanities for Public Service, in Bachelor of Art in Religion and Culture

Dr. Mary Kasarda presented the resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

Commission on Undergraduate Studies and Policies

Resolution CUSP 2018-19C Resolution to Approve New Major, Polymer Chemistry, in Bachelor of Science in Chemistry

Dr. Mary Kasarda presented the resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

Commission on Undergraduate Studies and Policies

Resolution CUSP 2018-19D Resolution to Approve New Major, Medicinal Chemistry, in Bachelor of Science in Chemistry

Dr. Mary Kasarda presented the resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

Commission on Undergraduate Studies and Policies

Resolution CUSP 2018-19E Resolution to Discontinue Bachelor of Science Degree in Engineering Science and Mechanics

Dr. Mary Kasarda presented the resolution for second reading and made a motion to approve. The motion was seconded. Dr. Rajesh Bagchi indicated that the Commission on Graduate Studies and Polices (CGS&P) was asked to review this resolution. The CGS&P determined that it does not have the responsibility for undergraduate recommendations and therefore will not issue a comment on this resolution. CGS&P does have the responsibility for graduate education and has concerns that the language in this resolution isn't clear on the commitment or direction to maintain the Engineering Mechanics graduate program. The CGS&P identified a need for better communication within the college, the department administration, and the faculty regarding the continued success of the Engineering Mechanics program.

Dr. James Lord, Engineering Science and Mechanics (ESM) Program Chair, indicated that the resolution suggests that the ESM student enrollment and the number of students seeking ESM as their first degree choice has been declining. Dr. Lord indicated that the number of students enrolled in the ESM undergraduate program has declined but only slightly. In 2013, there were 127 undergraduate students enrolled, and currently there are 118 students enrolled. That is only a decrease of nine students. The number of students seeking ESM as their first choice from 2013-2017 were 36, 68, 39, 33, and 39. This does not appear to be a decline.

When the ESM existed as a separate program in 2000, the undergraduate enrollment was 73 and the College of Engineering had a total enrollment of 5464. By the fall of 2013, the College enrollment had a 32% increase, an enrollment of 7199. The ESM experienced an 80% increase in enrollment growth during the same period. It

was later stated that by the Fall of 2014, undergraduate enrollment growth had not appreciably improved. Richard Benson, former Dean of the College of Engineering, merged ESM and the School of Biomedical Engineering Sciences to form BEAM in order to bring improved growth prospects for the ESM undergraduate program. Dr. Lord indicated that it is not clear that the merger was intended to bring improved growth prospects for ESM, especially since up to that point, ESM had experienced excellent growth. He then stated that Dean Benson wrote that:

"A motivating factor for this merger is that a BME/ESM partnership will enhance our ability to offer a new (for Virginia Tech) Bachelor of Science degree in biomedical engineering. I am further inspired by the prospect of a dual degree option where students receive both the ESM and BME undergraduate degrees."

Dr. Lord indicated that with that vision in mind, and the new BME degree accepting students for this fall, this appears to be entirely the wrong time to discontinue the ESM degree. ESM growth was apparently excellent prior to the merger and has since declined and the BME degree is now cited as the reason for the discontinuing of the ESM when BEAM was established to help strengthen both the ESM and BME programs. Dr. Lord indicated that the low student-to-faculty ratio for ESM is an issue, but he would like the opportunity to continue growing this program. He stressed that the enrollment in the Engineering Mechanics graduate program decreased by 35% during the time when the enrollment in the undergraduate program deceased by 23%. There is a concern that the discontinuation of the undergraduate program may heavily affect the Engineering Mechanics graduate program.

Dr. Lord then indicated that another reason cited by Dean Julia Ross in her support of the resolution is the planned growth within the college. Dean Ross has confirmed that no faculty or staff will lose their jobs as a result of this action so why not let the EMS faculty and staff help with the growth. There is nothing saved by this discontinuation because a majority of new students will come through ESM classes such as Statics, Deforms, and Dynamics whether they are enrolled in ESM or not.

The current Department Head supports the discontinuation, but not by faculty or students in the department. BEAM recently announced the appointment of a new Department Head (who holds an ESM degree). It would be best to put this discontinuation on hold until the new Department Head has an opportunity to try and improve enrollment numbers.

Dr. Lord then stated that the timing of this process troubles him. This resolution was approved by the College Curriculum Committee on February 6, 2019. On February 13, the ESM program along with the Engineering Education were required to add a statement to their websites that the ESM major is only available to students admitted to Virginia Tech in Spring 2019 or earlier. The faculty were told that:

"Bev Watford, Dean Ross, etc. want it very clearly stated that new students entering this summer/fall are not eligible to enter ESM."

A concern was raised regarding this statement because the resolution has not yet been adopted and that this action was premature. It appears to be circumventing the governance process. Rick Sparks, Associate Vice President and University Registrar, indicated that he advised Dean Ross to add this statement to the websites so that incoming students would know there is the potential that this program may be discontinued. The decision to offer a major through undergraduate admissions is an administrative decision of any college. Any major can be paused for lots of reasons such as resources or reorganizations.

Dean Julia Ross commented on some of the data presented. When the decrease in enrollment numbers for BEAM was calculated for the resolution, a time-to-time comparison was used for fall enrollment data. The enrollment was 127 students enrolled in the fall of 2013 and 99 students enrolled in the fall of 2018. The 118 students currently enrolled cited by Dr. Lord are prior to Commencement which is happening in a week. It is inappropriate to compare the fall 2017 enrollment number to the enrollment number that occurs a week prior to

Commencement. Dean Julia Ross indicated that the 118-enrollment number does not accurately reflect the current number of students in the ESM program.

Dean Julia Ross then indicated that the faculty members in BEAM are evenly split on the discontinuation of the ESM degree.

Dean Julia Ross then stated that a new Department Head for BEAM has been hired, and she specifically selected someone who has a background in both Engineering Mechanics and Biomedical Engineering. She was selected in part by her ability to understand and best support the graduate Engineering Mechanics program. Dean Ross stated that she knows that there have been concerns raised in the last two weeks as to whether the college is truly supportive of the Engineering Mechanics graduate program. She then indicated that she was disappointed with the letter that was submitted to the CGS&P but was never submitted to the college. (See attached letter dated May 1, 2019, and signed by Dr. Shane Ross.) The College of Engineering is fully committed to the Engineering Mechanics graduate program.

Dr. Mary Kasarda pointed out that the ratio of students to faculty in ESM is 9.8:1, but the ratio in the Mechanical Engineering is 22:1. Dr. Kasarda then indicated that she did a side-by-side comparison of the degree path sheets for ESM and Engineering Mechanics, and the first two years are almost identical. ESM candidates have a great opportunity to get a Mechanical Engineering degree. It was pointed out that the same can be said for Civil Engineering and Aerospace Engineering and other programs that are Statics based or Mechanics based. It was then stated that the first two years are core engineering curriculum courses and the same for all engineering programs.

Dr. Kasarda then stated that she felt that sending the amended letter (dated May 1, 2019 and signed by Dr. Shane Ross) regarding the graduate program on a Friday afternoon was poor timing. The table that is included in the letter suggests that incoming ESM undergraduates and graduates from their program varies from 2-5 students every year. The Mechanical Engineering graduate program has over 300 students, and she would argue that the additional 2-5 students could be recruited from Mechanical Engineering or Aerospace Engineering.

A question was raised as to the consequences of delaying the vote until next year. Dean Ross indicated that the resolution would die, and would have to be brought back for first reading next year. Right now the timing of the discontinuation of the degree is 2023, and a delay until next year will push the discontinuation until 2024, which would be a delay of a full year.

Ms. Rachel Iwicki stated that as a Mechanical Engineering student, she does not feel that Mechanical Engineering is a good substitute for ESM, which is more theory based and has a completely different focus than Mechanical Engineering. There really is no comparison between the two programs. She then indicated that ESM is not advertised as well as other programs. She feels she would have probably been better suited for ESM but did not know much about the program. Ms. Iwicki then indicated in conversations with students that the advertising and recruitment for ESM wasn't on the same level as other programs. Ms. Iwicki stated that that students within the ESM program are supportive of keeping the program and feel their voices were not heard.

Mr. John Livingston commented that looking from the outside, governance works best when those most affected are central to the process. The process for discontinuation of the ESM degree seems clouded and should be delayed to allow those affected ample time to weigh in.

A statement was made that Dean Julia Ross is doing what a dean is supposed to do by looking at the overall college as a whole and making improvements.

A comment was made that just three years ago, the ranking of Engineering Physics, an emphasis within the ESM program, was number four nationally, and a 2016 press release by the university stated that Engineering

Physics was the highest ranking engineering program at Virginia Tech. Thus a program is being discontinued that was recently one of the highest ranked programs.

It was then stated that the discontinuation of the ESM program has been a whirlwind. As of July, 2018, faculty in the program were unaware of any changes being considered. Only months later, the faculty are now trying to keep this program from being discontinued and none truly understand why the discontinuance is proposed. The faculty feel they have not had an opportunity to discuss this among themselves.

Dr. John Ferris, Faculty Senate President, indicated that the Faculty Senate waived their right to comment on this resolution for procedural matters. This resolution came through the College of Engineering Faculty Organization, the Engineering Curriculum Committee, the Commission on Undergraduate Studies and Policies, and Faculty Senate Commission that reviews these resolutions, so Faculty Senate thought at the time there had been appropriate time to consider this. That being said, Faculty Senators have reached out to Dr. Ferris and have requested an opportunity to comment on this resolution. Dr. Ferris indicated that he suggested those wanting to make comments should attend this University Council meeting.

Dr. Lord made one additional point that the resolution was approved by the University Curriculum Committee on a Friday afternoon (March 22), and by the Commission on Undergraduate Studies and Policies the following Monday (March 25). Despite promises that the ESM faculty would be kept informed of such discussions, they were in fact not made aware of those meetings until after they had occurred. Dr. Lord stated this in response to other members of the Council indicating that the process of discontinuing the ESM degree had progressed very smoothly up until this point and that the timing of the concerns in the May 1 letter signed by Shane Ross and distributed by the CGS&P was "distasteful" having been "sent out on Friday afternoon." Dr. Lord then asked the Council when were the ESM faculty supposed to make their concerns heard.

Ms. Susan Anderson indicated that she is a faculty member in the Math Department, and she indicated that she feels very uncomfortable voting on something that is disruptive to the College of Engineering. She then suggested that these discussions should have happened at a faculty/departmental level. Ms. Anderson is member of the Faculty Senate Committee which determines if resolutions should be reviewed, and she indicated that she would have suggested this resolution for further review had she known there was this much turmoil over it.

Dr. Pamela VandeVord, Interim Department Chair for BEAM, indicated that the faculty present at this University Council meeting are only a subset of the faculty. Dr. VandeVord previously conducted a survey (it was later indicated that this survey was in regards to improving growth of the department) of the entire faculty, and the majority of the faculty voted with a positive response. A question was raised regarding the size of the majority. Dr. Jake Socha indicated he had the numbers for the survey, which are listed below:

- Tenured faculty had nine votes in favor, eight votes not in favor, and eleven did not respond
- Other tenure-track faculty had four votes in favor, six votes not in favor, and three did not respond
- Collegiate Faculty had two votes in favor, zero votes not in favor, and one did not respond
- Instructors had six votes in favor, zero not in favor, and two did not respond

Dr. Socha indicated that this survey was sent out at 11:00 a.m. on a Friday and responses were required by Noon on the following Monday. Dr. Socha was not able to respond himself because he was in a location where he did not have access to this survey and was not aware of it. He then indicated that this survey was not in regards to discontinuing the ESM program, but it was about agreeing with the plan for improving growth. So overall there were more votes in favor than opposed to supporting the growth of the undergraduate program.

Following the discussion, a vote was taken by University Council, and the motion passed with majority of 21 in favor of the resolution and 19 in opposition of the resolution to discontinue the Bachelor of Science degree in ESM.

Commission on Undergraduate Studies and Policies

Resolution CUSP 2018-19F Resolution to Approve Transitional Plan to Facilitate the Change of Date of Entry Graduation Requirements

Dr. Mary Kasarda presented the resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

5. New Business

Commission on Faculty Affairs

Resolution CFA 2018-19E Resolution to Amend the Faculty Handbook Promotion and Continued Appointment Procedures for Faculty in University Libraries

Professor Bob Hicok first made a motion for first reading and action (commonly referred to as "waiver of first reading"). The motion was seconded. A vote was taken and the motion for action passed. A motion was then made by Professor Hicok to approve the resolution itself, and the motion was seconded. Professor Hicok indicated that this resolution, once approved, will change the composition of the University Promotion and Continued Appointment Committee by removing the director of Virginia Cooperative Extension, and the two faculty members from University Libraries and two Extension faculty members. There will be an addition of three University Library faculty members with continued appointment and two faculty members at the associate or professor level with tenure in one of the colleges. Nominations will come from University Libraries faculty and college faculty and not from the director of Virginia Cooperative Extension. A vote was taken on the approval of the resolution, and the motion passed.

Commission on Undergraduate Studies and Policies

Resolution CUSP 2018-19G Resolution to Amend Implementation for Pathways General Education Curriculum to Extend Pathways Ad Hoc Review Committee

Dr. Mary Kasarda first made a motion for first reading and action (commonly referred to as "waiver of first reading"). The motion was seconded. A vote was taken and the motion for action passed. A motion was then made by Dr. Kasarda to approve the resolution itself. This resolution, once approved, will extend the Pathways Ad Hoc Review Committee for one additional year. A vote was taken on the approval of the resolution, and the motion passed.

6. Announcement of acceptance and posting of Commission Minutes

Dr. Sands noted that these minutes have been voted on electronically and will be posted on the University web (http://www.governance.vt.edu). Note that the purpose of including Commission minutes on the agenda is to accept them for filing. University Council By-laws require that policy items be brought forward in resolution form for University Council action.

- Commission on Faculty Affairs April 5, 2019
- Commission on Graduate Studies and Policies April 3, 2019
- Commission on Staff Policies and Affairs February 26, 2019 March 26, 2019

7. Presentation

Dr. Bandy Salmon, Associate Vice President for Innovation and Partnerships, gave an update on the Innovation Campus that covered the following:

- How we got here and where we're going
- Impact on the Blacksburg campus
- The Innovation Campus and focus

8. Adjournment

There being no further business, a motion was made to adjourn the meeting at 4:12 p.m.



Shane D. Ross, Ph.D. Professor and Graduate Director Engineering Mechanics Program 495 Old Turner St. Norris Hall, Suite 333-P Blacksburg, VA 24061 P: (540) 231-1616 shaneross@vt.edu

May 1, 2019

Re: Engineering Mechanics Graduate Committee response to CUSP Resolution 2018-19.E to Discontinue Bachelor of Science Degree in Engineering Science and Mechanics

To: Commission on Graduate Studies and Policies

Enrollment numbers for the Engineering Mechanics (EM) graduate program are specifically mentioned in the supporting documentation for CUSP Resolution 2018-19.E under the rationale for the resolution to discontinue BSESM (further, the graduate program is erroneously referred to as the "ESM graduate" program), suggesting that, according to the authors of the resolution, the ESM undergraduate and EM graduate programs are inextricably linked. This is a key reason we find it necessary to outline the effect of the discontinuation of the ESM undergraduate program on the EM graduate program, a graduate program which has strong appeal to domestic students^a and has seen demand (as measured by applicant numbers, shown below) grow steadily, and markedly, by 25%-60% every year for the last three years—an impressively high rate of continuous demand growth, perhaps the highest in the College of Engineering (COE). Moreover, our graduates are successful. Recent examples include the recognition by the COE of an EM doctoral student as the 2019 Outstanding Doctoral Student for the entire COE, and two new doctoral students receiving the prestigious NSF Graduate Research Fellowship. Moreover, our hundreds of EM alumni contribute to many arenas of industry, government and academia. In fact, over the past decade, 1 out of every 3 of our recent 100+ EM doctoral students have entered faculty positions (more than triple the national average for engineering PhDs) as academic ambassadors of Virginia Tech across the globe.

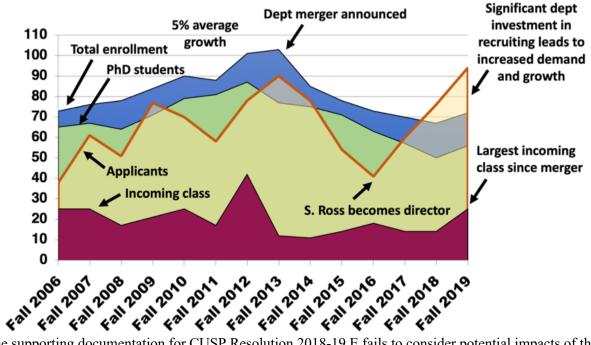
The presentation of the data on graduate enrollment and graduate degrees awarded in the supporting documentation for CUSP Resolution 2018-19.E is not holistic. The presentation of data fails to acknowledge the significant impact of the 2014 merger of the former ESM department with SBES^b on EM graduate student recruiting, an event from which overall EM graduate enrollment numbers are only starting to recover^c (see chart below). This recovery is in large part due to significant investment in EM graduate recruiting from the BEAM department since 2016, when P. VandeVord became interim department head and appointed S. Ross as EM graduate director. With support from the BEAM administration, we extensively revised and streamlined our doctoral program in 2017, making the curriculum more flexible to encourage interdisciplinary research across the university and adding significant communications and ethics components. The COE's New Horizons Program and the Graduate School have also helped us not only recruit excellent students but also increase diversity in our program, with recent incoming classes composed of 25% female and 10% underrepresented minorities.

^a Over two-thirds of our recent incoming graduate student cohorts have been domestic students.

^b Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences (SBES).

^c Fall 2019 is the first year of total EM graduate enrollment growth since the merger.

Note below the result on graduate enrollment the last time we had a program disruption (the merger), and the higher enrollment at the time of the disruption (our highest enrollment of 103). The effects of another program disruption, and starting from a smaller enrollment (72), would likely result in even steeper declines in EM enrollment.



The supporting documentation for CUSP Resolution 2018-19.E fails to consider potential impacts of the ESM undergraduate discontinuation on future EM graduate enrollment, as outlined below. As the COE Dean has stated in the email dated 9/28/18 provided to you, the "transition would be slow, well-thought out, and methodical." To achieve this, more consideration is needed to develop a mitigation strategy and preserve the vitality of the EM graduate program, a "highly valued" program that the Dean recognizes plays a "vital cross-disciplinary role ... in achieving the college's mission and vision" and which "underpin[s] many of the College's foundational strengths". Indeed, when the merger occurred under a previous COE Dean (Benson), the new department was assured in a letter dated 4/28/14 that "there will be no changes in curricula as a result of this merger", yet this is the broader implication of CUSP Resolution 2018-19.E.

1. The ESM undergraduates have been a significant pipeline into the EM graduate program, primarily through the accelerated ESM UG/G program ("5-year BS/MS") through which we recruit, on average, about 25% of our incoming EM graduate students, as shown in the following table. Given the requirements of the UG/G program, these are among our best students, and often stay for a doctorate. *Discontinuing the ESM undergraduate program eliminates this pipeline of highly qualified EM graduate students*.

Year	Incoming ESM UG/G	Total Incoming EM students	Incoming UG/G as % of total
Fall 2014	5	11	45%
Fall 2015	4	14	29%
Fall 2016	2	21	10%
Fall 2017	5	14	36%
Fall 2018	2	15	13%
Fall 2019	5	24	21%

2. The EM graduate program uses GTAs provided by the COE as part of the funding offers for graduate student recruiting, primarily doctoral students. Currently, the EM program receives 16 GTAs from the COE, which provide funding for about 20% of our enrolled students. The COE provides these GTAs in proportion to ESM student credit hours (SCHs).

With the discontinuation of the ESM undergraduate program, ESM SCHs will decrease, leading to fewer GTAs, making it more difficult to make competitive multi-year funding offers to recruit the best graduate student applicants.

3. Since its first announcement in September 2018, the ongoing process of discussing discontinuation of the ESM undergraduate program has resulted in faculty leaving the BEAM Department. The choice to leave the department was offered by the COE Dean. The number of BEAM tenured and tenure-track faculty generalized as ESM faculty were, according to the COE Dean, **17** at the beginning of Fall 2018. That number fell to **14** at the beginning of Spring 2019. Departing faculty cited the looming threat of discontinuing the ESM undergraduate program as the single most important factor in their decision, especially for those whose research heavily involves undergraduate research assistants. The number of ESM faculty could be lower beginning Fall 2019, perhaps as low as **10** or fewer^d, depending on, among other factors, the final approval of CUSP Resolution 2018-19.E. *A dwindling number of ESM faculty will make it increasing difficult to staff EM graduate courses, which our growing enrollment numbers require.*

In any given year, 30 of our 42 graduate courses are typically offered to meet degree requirements (some are given in alternate years). Using the department average teaching load of 2 courses per year, just for staffing EM graduate courses, this requires a minimum of 15 ESM faculty—*assuming they only taught graduate courses*, which they do not. This also assumes faculty of the proper expertise to teach a given course, but some areas of expertise will be disproportionately affected by the faculty departures. Compounding the staffing problem, the COE Dean stated in her meeting with the BEAM department on 9/28/18—simultaneous with her announcement of an intention to discontinue the ESM undergraduate degree—that *there will be no hiring of additional BEAM tenure-track faculty with ESM expertise*. This state of affairs makes it difficult to achieve the Dean's stated intention in her 9/28/18 email that "no changes will be made to BEAM's graduate engineering mechanics (EM) program."

4. If the trends cited above continue, the numbers of EM graduate students enrolled would, despite recent growth, likely fall, further exacerbating the trends of lower graduate student and faculty numbers. Within a few years, the numbers of EM graduate students could be low enough—and with few department faculty capable of teaching the EM graduate courses—that an argument might be made to end the program. *Though this is not the intention of CUSP Resolution 2018-19.E, it could be the result.* Given that a major rationale for the discontinuation of the ESM undergraduate program was falling enrollment numbers, it is reasonable to assume that a similar argument might be made for the EM graduate program.

We do not see this as a desirable outcome, especially given the high quality of student talent we have been able to attract, the high demand for these applicants among the faculty, and the overall growth in demand for the EM graduate degree to record high levels.

We note that the demise of the Engineering Mechanics graduate degree program would bring with it the end of a GTA pool with unique expertise who serve the entire COE by assisting the sophomore-level ESM service courses which most engineering majors take, all of which are fundamental courses in engineering mechanics (Statics, Dynamics, Mechanics of Deformable Bodies). With a currently estimated incoming freshman class of 2700 engineering majors (**double** what it was just five years ago and 800 over the intended target^e), these service courses will require even greater numbers of qualified GTAs, not their elimination^f.

^d This estimate is based on other faculty with offers on the table to move to other departments. It does not include faculty leaving the university, which is also possible.

^e Past first-year engineering student enrollment numbers are at <u>https://enge.vt.edu/undergraduate.html</u>

Current projections for Fall 2019 engineering enrollment provided by the Department of Engineering Education. ^f We will have twice the undergraduate students to teach, but half the GTAs compared to five years ago (we had 30 provided by the COE at that time), thus quadrupling the workload for the GTAs, assuming they aren't reduced even further.

In summary, the discontinuation of the ESM undergraduate program has drastic unintended consequences for the EM graduate program. We therefore urge that more consideration is needed to develop a mitigation strategy and preserve the vitality of the EM graduate program.

We end by saying that our department is in the final stages of new department head search, the first department head search for BEAM, and therefore, as a time of transition in our department, it would be wise to involve the new head in major decisions that impact multiple, if not all, programs within the department. It is only fair to the future leadership of the department that such significant decisions be left to their discretion as they chart a vision for the department and its academic programs.

On behalf of the Engineering Mechanics Graduate Committee, Nicole Abaid, Scott Case, Mark Cramer, Shane Ross, and Jake Socha (all tenured and tenure-track faculty in BEAM),

Respectfully,

Shane D. Ross

Shane D. Ross, Ph.D. Professor and Chair, Engineering Mechanics Graduate Committee Department of Biomedical Engineering and Mechanics (BEAM) College of Engineering

CAPFA Minutes

Commission on Administrative and Professional Faculty Affairs

April 10, 2019 – 1:30 pm – 2400 North End Center/Zoom

Present: Present: Jeremy Daubert, Greg Fansler, Alan Grant, Maia Greene-Havas, Debbie Greer, Amy Hogan, Jennifer Hundley, Lonnie Johnson, Monika Lawless, Margaret Radcliffe

Absent: Janice Austin (with notice), Maria Balota, John Benner, Alan Campbell (with notice), Amanda Covey, Martin Daniel (with notice), Cynthia Hampton, Joy Hottenstein (with notice), John Massey, Karen Munden, Cayce Myers, James Orr, MaDonna Overstreet (with notice), Terri Pecora (with notice), Vicky Ratcliffe, Lotus Wang

Ms. Lawless called the meeting to order at 1:30 pm. A quorum was present.

Note of Approval of Minutes from February 13th done electronically.

Ms. Lawless reported the minutes were sent out for review, and were approved electronically. They have since been forwarded to the University Council.

Old Business

Ms. Lawless noted that the first email went out to the newly formed CAPFA listserv on March 20th and she received several responses that the listserv was a great idea.

New Business

Mark Nichols and Christa Miller (TLOS) presented "Universal Design and Accessible Technologies" to the group. They reported that there are legal requirements that Virginia Tech's websites be accessible, but there are also practical reasons why we would want our websites and publications to be accessible to everyone. There are numerous design best practices and tools we can all use to ensure our communication products are accessible.

Ms. Lawless noted that she will send out an email shortly to the AP Faculty listserv which will provide a survey link for CAPFA election voting.

Commission Representative Reports:

Committee on Employee Benefits – Margaret Radcliffe reported that the committee is reviewing the mandatory holiday closing policy and how it impacts staff. While staff can use leave without pay status for the mandatory closing, they do not accrue leave during that time. A survey went out recently asking for feedback including the possibility of using the four staff holidays throughout the year during the end of year closing. Ms. Radcliffe reported that within 24 hours of sending out the survey, they received over 1100 responses. The results of the survey will be used to craft the committee's recommendation to the university.

Commission on Staff Policies and Affairs – Margaret Radcliffe noted the commission has formed several subcommittees including one reviewing a newsletter option, one on consolidating all the benefits available to staff both at the university and in the local community, and one on improving staff retention. Related to that, John Massey (HR) is working on a class to improve supervisor training.

Other Business

Our next meeting will be on May 8, 2019.

Adjournment

Ms. Lawless asked for a motion to adjourn the meeting at 2:30 p.m. and Greg Fansler seconded the motion.

CAPFA Minutes

Commission on Administrative and Professional Faculty Affairs

May 8, 2019 – 1:30 pm – 2400 North End Center/Zoom

Present: Janice Austin, Allen Campbell, Amanda Covey, Greg Fansler, Alan Grant, Debbie Greer, Amy Hogan, Joy Hottenstein, Jennifer Hundley, Lonnie Johnson, Monika Lawless, Terry Pecora

Absent: Maria Balota, John Benner, Maia Havas-Greene (with notice), Cynthia Hampton, John Massey, Karen Munden, Cayce Myers, James Orr, MaDonna Overstreet, Margaret Radcliffe (with notice)

Ms. Lawless called the meeting to order at 1:30 pm. A quorum was present.

Note of Approval of Minutes from April 10th done electronically.

Ms. Lawless reported the minutes were sent out for review, and were approved electronically. They have since been forwarded to the University Council.

Old Business

Ms. Lawless noted that there were 23 nominations for the 10 open CAPFA positions. Unfortunately, there were no nominations from extension. We will work on engaging extension AP faculty in CAPFA. Ms. Lawless will send the election results to the AP Faculty Listserv.

New Business

Ms. April Myers and Ms. Lori Buchanan (Office Policy and Governance) presented an overview on university governance, including the resolution process. There are approximately 600 members of university governance. There was a short discussion on the absence of an AP Faculty Senate which will be a goal to discuss next year.

The topic of winter holiday closing was raised. Ms. Greene-Havas reported that the issue came up at a recent Commission on Equal Opportunity and Diversity meeting. Some members discussed concerns over the fact that AP faculty need to take annual leave on holidays they don't necessarily celebrate, but then need to use additional annual leave on holidays they do celebrate, which takes away from overall annual leave. Mr. Daniel noted the issue he hears most about is the dichotomy of which holidays we close for and which ones we elect to close for. There are a lot of other religious holidays which we do not get off. He also noted that a lot of AP faculty work during the holiday because they're telecommuting. Ms. Austin (graduate school) said it's difficult to stop processing student applications during that busy time. Mr. Johnson noted the winter holiday impacts the extension employees because there's no clarity on what to do when counties remain open, but VT is closed and vice versa. Other comments included leave equity issues between staff and faculty and how the growing Roanoke and NOVA footprints will impact this issue. Participants agreed it would be a good idea to poll AP Faculty members on the issue, but we will coordinate with other commissions who may be polling their constituents as well. Ms. Lawless noted she is scheduled to meet with the Deloitte team assisting with the Administrative and Operations Transformation Initiative and will discuss this issue with them.

Commission Representative Reports:

Committee on Employee Benefits – Ms. Radcliffe reported that the results of the Staff survey regarding shifting the four staff-only holidays to the winter closing were evenly divided for and against, so the decision was not to make any changes to the current policy.

Commission on Staff Policies and Affairs –Ms. Radcliffe noted that the majority of the April 23rd meeting was spent on a presentation on the staff survey regarding the winter closing and the ensuing discussion.

Women's Alliance – Ms. Greene-Havas reports concerns discussed included the fact that there are staff and faculty senates, but no AP faculty senate, there is a lack of consistent renewal notifications for restricted faculty positions, and there is a lack of consistency on performance reviews. Mr. Daniel noted that Dwayne Pickney and Bryan Garey are reviewing the performance review issue.

Other Business

This is the last meeting of the academic year. Mr. Fansler will serve as the CAPFA chair next year. Ms. Lawless thanked everyone for their service.

Adjournment

Ms. Lawless asked for a motion to adjourn the meeting at 2:30 p.m. and Greg Fansler seconded the motion.

COMMISSION ON EQUAL OPPORTUNITY AND DIVERSITY

Full Membership Meeting 10:30AM, Monday, April 29, 2019 Room B, The Graduate Life Center Our meeting is located on Monacan and Tutelo land.

PRESENT: Andrew Alston, Ellen Banks, Elysia Budu for John Livingston, María del Carmen Caña Jiménez, Alicia Cohen for Menah Pratt-Clarke, David Clubb, Maia Greene-Havas, Khaled Hassouna, Kimberley Homer, Deyu Hu, Chris McCullough, Christa Miller, Tracy Newton, Kelly Oaks, Kase Poling, Marcy Schnitzer, Anthony Scott, Kayla Smith, Christine Tysor, Pam Vickers, Bevlee Watford, Rachel Woodson, John Gray Williams.

Guests: Susan Hughes, Marcia Elliott

REGRETS: Mae Hey (with notice), Nikos Harasty, Sarah Leftwich, Polly Middleton, Yolanda Avent (with notice), Elizabeth Spingola, Davon Woodard.

WELCOME AND INTRODUCTIONS

Kimberley welcomed everyone and began a round of introductions. Once again, there was no Zoom session, but there were enough chairs for everyone.

THE NEW RECRUITMENT AND ONBOARDING SYSTEM

Susan Hughes and Marcia Elliott gave a presentation on PageUp, Virginia Tech's choice to replace PeopleAdmin for recruiting and onboarding. (Her presentation is attached in PDF form.) One key improvement is the ability to notify candidates when they will not be moving forward in a search. PageUp calls this a "disposition message." There was general agreement that a better system will lead to better recruiting and retention results. There were a few questions regarding the timing and approval of the "disposition messages," to which Marcia responded that although a selection of messages are pre-written, the search chair or hiring manager sends the messages in the system. They are not automatically sent. Kimberley offered to do user experience testing from the perspective of applicants and recruiters. Following this there was discussion about the diversity of the advisory committee and people testing the system. This led to discussion about how HR could recruit some additional user testers from across the university with multiple backgrounds and levels of hierarchy represented to ensure that the internal use of the system is friendly and inclusive.

NOMINATIONS AND LIAISONS FOR UNIVERSITY GOVERNANCE FOR 2019-20

Marcy Schnitzer described the positions that need to be filled, which are CEOD Chair, CEOD Vice Chair, representatives from the Hispanic/Latino/Latina Caucus, Veterans Caucus, and Asian/Asian American Caucus, at large graduate student, at large undergraduate student, representatives from the SGA and GSA, and liaisons to the University Council and Campus Development Committee. Kase Poling nominated Kimberley Homer for Chair and Christa Miller for Vice Chair, and all those present voted to approve. Voting for University Council liaison and Campus Development Committee will be done by electronic poll before May 20th, and the caucuses, SGA, and GSA will appoint their representatives when they reconvene in the Fall. At large students will also be recruited in the Fall.

Discussion ensued about the 10:30 am Monday timing for CEOD meetings, since this is difficult for students and teaching faculty. Dr. Watford pointed out that many who serve also serve on other commissions, and changing the time would likely result in more conflicts.

INTERNATIONAL ISSUES WORKGROUP UPDATE

Khaled Hassouna reported that the workgroup has met, and decided that meeting on familiar ground--the old Cranwell Center model--is important for all members and allies of the international community, and work is in progress to bring that about.

PRESIDENTIAL PRINCIPLES OF COMMUNITY AWARDS

Marcy Schnitzer announced the winners of the Principles of Community Awards, who were honored at a special event at the Moss Arts Center on May 2:

The Presidential Principles of Community Award recognizes faculty and staff members who exemplify and promote a welcoming and inclusive environment in accordance with the university's Principles of Community.



Long Term Contribution Award: Dr. Sam Cook



Department Award: Department of Religion and Culture



New or Recent Contributions Award: Christine Tysor



Team Award: Virginia Dares team

COMMENT

Members are encouraged to promote and attend the cultural recognition ceremonies. Dr. Watford noted that advertising times sooner would allow better attendance, especially by out-of-town family members. CEOD will work with the Cultural and Community Centers director on this.

NEXT MEETING

The next CEOD meeting, which was scheduled for May 20, 2019, has been cancelled because it is after the end of the Spring semester. The meeting schedule for Fall 2019 will be advertised once it is set.

Appreciation to Marcy Schnitzer, Alicia Cohen, and Andrew Alston for logistical support, and to Christa Miller for improving the minutes.

Commission on Faculty Affairs

April 19, 2019

10:30 – 12:00 Noon

130 E Burruss Hall

In Attendance: , J. Finney, J. Ogorzalek (for GSA), M. McGrath, T. Schenk, B. Hicok, M. Agah, R. Blythe, M. Paretti

Absent: L. Brogdon, J. Hawdon, J. Spotila, G. Daniel, Z. Mackey, R. Sebek, M. Abbas

Guests: M. Lewis, K. DeBose (University Libraries), P. Young (Open Access Policy Working Group Rep)

1.	Approval of agenda	B. Hicok
	Meeting called to order at 10:30 a.m. Meeting called to order at 10:30 a.m.	
2.	Approval of April 5, 2019 minutes	B. Hicok
	The minutes were approved unanimously.	
3.	Resolution LFA 2018-19A: second reading	Kira Dietz
	The resolution was approved unanimously.	
4.	Update on Open Access policy	Philip Young
	A presentation was made on a proposed Faculty Open Access Policy by P. Young.	
	Questions raised focused on the legal mechanisms allowing this policy, whether the university or faculty member would be charged with identifying which journals have open access waivers embedded within their copyright agreements, and what are the unknowns regarding signing over "non-exclusive" rights to the university.	

In addition, the question was raised on whether graduate students could have access to elements in order to upload papers that have been accepted for publication on which they are an author. Note: Peggy is looking into this now via a trial college.

5.	Faculty Workload Equity	B. Hicok/E. Plummer
	This topic was not covered.	
6.	Other business	B. Hicok
	No other business was presented.	
7.	Adjourn	B. Hicok
	The meeting was adjourned at 12:00 p.m.	

MINUTES

Commission on Graduate Studies & Policies April 17, 2019 3:30 – 5:00 p.m. Graduate School Conference Room

Present: Rajesh Bagchi (Chair), Lujean Baab, Nancy Bodenhorn, Karen DePauw (ex officio), Paul Emmons, Roan Parrish (for Samantha Fried), Madlyn Frisard, John Hole, Rachel Holloway (ex officio), Anurag Mantha, Gail McMillan, Hannah Parks, Annie Pearce, Martina Svyantek, and Zhiwu Xie.

Absent with notification: Mehdi Ahmadian, Lesa Hanlin, Joseph Kozak, Xin Luo, and Robert Sumichrast.

Absent without notification: Cynthia Hampton, Alexis Hruby, Sarah Karpanty, Kathy Lu, Nick Rexroad, and Tyler Walters (ex officio).

Visitors and invited guests: , Zo Amani, Janice Austin, Kevin Edgar, Bill Huckle, Will Makowski, and Michelle Yancey.

Call to Order

The meeting was called to order by Dr. Bagchi at 3:30 p.m.

Approval of the Agenda

The agenda was approved as presented.

Approval of the Minutes

The minutes of April 3, 2019 were approved as amended.

Committee Reports

Graduate Curriculum Committee

The Graduate Curriculum Committee minutes of April 11, 2019 were accepted as presented.

Graduate Student Appeals Committee

There was no report.

Degree Requirements, Standards, Criteria, and Academic Progress (DRSCAP) Committee

Dr. Bodenhorn reported on the changes of the wording on the ESS checkboxes when there is a final exam. DRSCAP members have met with faculty to discuss possible changes. Dr. DePauw noted that DRSCAP

members' suggestions are valued by the Graduate School. The next topic for consideration by DRSCAP will be consideration of the revocation of degrees, including ETD's.

Old Business

The membership reviewed the second reading of the iPhD proposal from Will Makowski. The proposal was approved.

New Business

Dr. Huckle introduced Michelle Yancey. She presented her iPhD proposal to the membership. Following her presentation, the commission discussed the first reading of the proposal and provided Ms. Yancey with additional considerations for her proposed study. The second reading will be held at the next meeting.

Dr. DePauw introduced the Mental Health Task Force Report recently distributed following presentation at University Council. In particular, she addressed the fifth recommendation that states CGS&P "should evaluate and consider changes to academic practices that have a history of adverse effects on student mental health and well-being". The commission "would also evaluate academic opportunities which promote student mental health and well-being". These evaluations and opportunities will be discussed further at the next CGS&P meeting. Dr. Bagchi recommended a sub-committee be considered with graduate student representation.

Graduate School Update

Dr. DePauw reported that next Tuesday is the 50th celebration of graduate education in the National Capital Region. Progress continues in the planning for fall, 2019, admissions and enrollment at the NVC. Strategies are being identified for future semesters.

Several academic transactions impacting the Graduate School were approved by the BOV at the recent meeting. They include:

The PhD degree in neuroscience was approved by the BOV and is moving forward to SCHEV for approval.

The renaming of the Commission on Graduate Studies and Policies to the Commission on Graduate and Professional Studies & Policies was approved by the BOV. This will be effective Fall, 2019.

The School of Medicine Student Honor Code was approved by the BOV.

Constituency Updates

Graduate Student Assembly

Ms. Svyantek announced the election of officers for next year will be held a week from Thursday. This coming Thursday there will be a meet the candidate event.

Graduate Honor System

Mr. Mantha reported there are two open cases from fall. A spring case was reported and dismissed. Mr. Mantha will continue his position in 2019-2020.

University Library Committee

Dr. Xie reported the committee met on April 10th. Dr. Xie gave a presentation on the library's vision for the Innovation Campus. The membership showed strong support for the vision.

Faculty Senate

Ms. McMillan reported the research assessment survey is being evalulated now and will be sent to the BOV at completion.

Student Government Association

There was no report.

Board of Visitors

Mr. Amani reported on his experience with the BOV members at the recent meeting. He noted the members had attended Vt as undergraduates, but none had the experience of being a graduate student at VT. He also addressed student concerns and mental health issues related to personal financial issues with the BOV. Ryan King will be the new graduate BOV representative for 2019-2020.

University Council and Commission Updates

Dr. Bagchi reported that the most recent University Council meeting was focused on the discussion of the Mental Health Task Force Report.

The first reading of the MEng Resolution was held at University Council.

Dr. Baab noted on May 16th we will celebrate Global Accessability Day.

There were no other commission updates.

Announcements

Dr. Bagchi gave his thanks to the membership for their service this past year. He will unfortunately not be in attendance at the next meeting. Dr. Hole will chair in his absence.

Dr. DePauw reminded everyone of commencement on May 16th.

Dr. DePauw gave her thanks for Mr. Mantha's contributions to the BOV breakfast and his discussion in regard to candidacy status with the BOV members.

Dr. DePauw announced the Graduate Education Task Force will begin its work in the near future.

Dr. DePauw announced Will Walton's resignation from the Graduate School. A search is underway.

Adjournment

The meeting was adjourned at 5:00 p.m.

Respectfully Submitted,

/s/

Marilynn R. King On behalf of Karen P. DePauw, Ph.D. Vice President and Dean for Graduate Education

COMMISSION ON OUTREACH AND INTERNATIONAL AFFAIRS Minutes April 18, 2019; 3:30-4:30 p.m. Gateway Center; 902 Prices Fork Road; Suite 120

<u>Attendance:</u> Andrea Brunais, Urs Buehlmann, Lehi Dowell, Guru Ghosh, Ben Grove (representing Ed Jones), Roberto Leon, Shelly Martin, Karen Munden (via phone), Susan Short, Tom Thompson

<u>Absent:</u> Chen Chang, Wayne Crotto, Gregory Daniel, Ed Jones, Juan Luis Nicolau, Morgan Paulette, Valerie Ragan, Heinrich Schnoedt, Brett Shadle, Madilynne Tanner, Xiaowei Wu, Kang Xia

1. <u>Welcome and Introductions</u>

Urs Buehlmann welcomed the group, self-introductions were made.

2. Agenda Approval

Urs made the call for motion to approve the agenda; a motion was made; seconded; all were in favor, there was no opposition and the agenda was approved.

3. Call for Announcements

The call for announcements was made, there were no announcements.

4. <u>Announcement of Approval of Minutes, March 21, 2019</u>

The minutes from the March 21, 2019 meeting were approved electronically and were sent to University Council to be posted to the University Governance website upon approval by University Council. Minutes can be found: http://www.governance.vt.edu/.

5. Chairman's Report

The University Council meeting from the April 8, 2019 included old business: The Commission on Faculty Affairs presenting the resolutions for first reading: 1) to amend the Faculty Senate Constitution to adopt the parliamentary rules; 2) to amend the Faculty Senate Constitution regarding term limits; 3) to amend the faculty Senate Constitution regarding amendments to the Faculty Senate Constitution; 4) to amend the Faculty Senate Constitution regarding the function of the Faculty Senate as Faculty Voice. All of those were passed, one slightly changed the wording.

New business included: Resolution to establish a Master of Engineering Degree in Computer Science and Applications (CSA-Meng) presented from the Commission of Graduate Studies and Policies. Commission of Undergraduate Studies and Policies presented a resolution to approve a new major in Childhood Pre-Education.

Two presentations were given; 1) Aubrey Knight and Dan Harrington presented on the Virginia Tech school of Medicine honor code. 2) Patty Perillo and Chris Wise gave an overview of the study of mental health taskforce, which focused on students. The next meeting is scheduled for Monday, April 22, 2019.

6. <u>Reports</u>

- a) Ben Grove gave the report for the Virginia Cooperative Extension (VCE) on behalf of Ed Jones: Tom Thompson and Ed Jones Visited Egerton University and participated in the conference on Cooperative Extension in East Africa. They are exploring ways to follow up and continue to build on the partnership with the center for excellence and sustainable agriculture and agribusiness management, which is hosted at Egerton University. The APLU Extension Committee on Organizational Policy (ECOP) met on campus last week. The focus of their meeting was to explore ways that extension can add to the outreach missions and land grant universities and to focus on the future of cooperative extension. Ben thanked Susan Short and her office in supporting that event. The central district director interviews have concluded and input is being sought from the field before making a selection; the hope is to fill that position soon. In 2020, the national association of accounting agriculture agents will host their annual meeting in Virginia Beach; VCE will be the organizational host. There will be many opportunities to showcase Virginia Tech in addition to larger cooperative extension systems, more information to come.
- b) Tom Thompson reported on the University Committee on International Affairs (UCIA) meeting from March 25, 2019: 1) UCIA is trying to structure toward a community practice. The members will be learning in more detail the approach and strategy for various units and their international protocol, in order to better understand the work in various divisions. 2) UCIA discussed working on the challenges of finding short-term housing for international visitors. The length of stay tends to be too long for a hotel and too short for a lease at an apartment complex. Francis Keene, interim director for Housing and Residence Life has talked to the group. The hope is to come up with a list of best practices and resources that can be identified, and what can be accomplished collectively to be as inviting as possible. 3) Joint data needs related to international programs for various colleges have been

identified, and include student mobility and faculty mobility. Nicole Sanderlin from engineering is chairing a task force that is gathering information to get a package of best practices and data needs and includes not contacting institutional research or other units on an ad hoc basis.

Guru Ghosh added that there are some colleges that are not participating in some of those databases. He indicated that the student activity and mobility data sets are pretty well organized, but the faculty activity is inconsistent. There is currently a mechanism to provide some standardization, and student activity is being tracked by the global education office.

Urs asked if a note could be made to ask the incoming chair of UCIA that they update COIA on the efforts, or someone from the committee.

Approved UCIA meeting minutes are available on-line: <u>https://www.outreach.vt.edu/about/commissions-committees/ucia.html</u>.

7. OIA Activities

- 1) Urs reminded the group that the provost is scheduled to be at the August 29, 2019 COIA meeting to speak about the future of Global Education Scholarships.
- 2) Relative to both chair for UCIA and COIA being present at the COIA meeting, Guru spoke about immigration matters that International Support Services (ISS) are encountering. Guru has discussed with ISS that some of the practices may need to be put forth as university policies. Ultimately, ISS adheres to federal immigration regulations and laws, and many of their practices may not be university policies, but a policy may need to come from his office. Guru has asked lan to prepare a document for UCIA for next fall, and the practices will ultimately be brought to COIA.

8. Commission Board Member Comments

Susan made two (2) announcements: 1) the proposal deadline for Carilion educational funding for projects, seminars and events, is next Friday, April 26, 2019. If there are questions about what Carilion has funded previously, Susan can speak to those questions. 2) The Thinkabit Lab has been established after the successful model in Northern Virginia. The ribbon cutting will take place at the Roanoke Center next Friday, April 26, 2019, and the lab is being referred to as a Qualcomm inspired Thinkabit Lab. Over the past two weeks, sixth graders from Franklin County schools have been visiting in steady streams. Susan remarked that Lesa Hanlin and her team has done a really nice job of getting the lab up and running.

A motion to adjourn was made, seconded; all were in favor. The meeting adjourned at 3:59 p.m.

Respectfully submitted,

Courtney Holland, Recording Secretary

TENTATIVE MEETING DATES FOR 2018-2019-(All meetings will be from <u>3:30-4:30 p.m.</u> and will take place at the Gateway Center-902 Prices Fork)

• May 9, 2019

TENTATIVE MEETING DATES FOR 2019-2020.(All meetings will be from <u>3:30-4:30 p.m.</u> and will take place at the Gateway Center-902 Prices Fork)

Regular Meeting

- August 29, 2019 3:00 p.m. Orientation for New Members
- August 29, 2019 3:30 p.m.
- September 19, 2019
- October 17, 2019
- November 21, 2019
- December 12, 2019
- NO JANUARY MEETING
- February 20, 2020
- March 19, 2020
- April 16, 2020
- May 7, 2020

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Minutes

COMMISSION ON RESEARCH

December 12, 2018 130 Burruss Conference Room 3:30pm-5:00pm COR Documents available to COR members in Team Drive: <u>COR FY2018-2019</u>

Attended:

Members: Virginia Pannabecker, Marie Elisa Christie, Barry Miller (for Stefan Duma), Kevin McGuire, Deborah Milly, Brian Britt, John B. Phillips, Elizabeth Grant, R. Bruce Vogelaar, Zhen (Jason) He, Suzie Le, Uri Kahanovitch, Randy Heflin (for Sally Morton), Lijuan Yuan, Saied Mostaghimi

OVPRI: Theresa Mayer, Laurel Miner, Diane Zielinski

Presenters: Andi Ogier, Director, Data Services, University Libraries; Peggy Layne, Assistant Provost for Faculty Development, Office of the Executive Vice President and Provost

- I. Approval of the Agenda A. Approved via vote
- II. Approval of November Minutes approved by email
- III. Announcements
 - A. Availability for January 9th meeting
- IV. [3:40] Unfinished Business
 - A. Report of Ongoing Activities
 - 1. Committee on Research Competitiveness S. Duma
 - a) Continuing to interview. Have spoken with representatives at about 35 higher education institutions. Report will be shared in spring.
 - 2. University Library Committee V. Pannabecker
 - a) Discussing the Library search on the website, and interested in comments or feedback from the university community. Discussing a library hub model - minimum components of a library - for new and changing spaces and locations of Virginia Tech. Reviewing e-publications and subscription models to consider library collection options in an environment of ever increasing subscription costs.

- 3. Faculty Senate B. Vogelaar or B. Britt
 - a) Efars system: heard an update from the executive committee. There is concern about how it may be used to capture research and reflect other activities. Met with candidates for Provost position. Discussed Promotion and Tenure guidelines. If there is a change to make research the essential component for promotion to Associate, what does this mean for the other work and roles, such as Teaching and Serivce? Created a committee evaluating service component.
 - Comment: evaluating service should take into consideration relevance and quality of service towards area of expertise and accomplishing meaningful work as part of that service.
 - (2) How do the following come up in Promotion and Tenure guidelines?: Role of higher education and state expectations, entrepreneurial activities, economic diversification, transition of discoveries into commercial products and services to existing commonwealth industries or new startups. Response: members of faculty senate are working on these guidelines - tension between opening guidelines for departmental areas of focus, and need for university standards; need for greater feedback between departments/colleges and university level review areas.
- 4. Update to Policy 13005 A. Michaels
 - a) Draft of a revised 13005 document is completed. It has been distributed to some institute affiliates and to Dee Harris of the office of Vice President for Policy and Governance for feedback.
- 5. Open Access Policy update K. McGuire / V. Pannabecker
 - a) The committee is working on a new presentation and a campus news article to build awareness. They welcome opportunities to share the presentation with groups around campus (departments, research groups, colleges, others). Contact the committee members at: <u>openaccess@vt.edu</u>.
- 6. Software Review Backlogs update V. Pannabecker
 - a) No update.
- B. OVPRI Update T. Mayer or L. Miner
 - 1. See below in new business.
- V. [4:00] New Business
 - A. Biocomplexity Institute T. Mayer or L. Miner
 - Would like address incorrect information that was in the *Roanoke Times* regarding the Biocomplexity Institute (BI), the move of many from BI to UVA, and the research funding dollars that will move with them. If you

hear concerns about the *Roanoke Times* report, please help clarify this. The total award amount for the research portfolio that was reported in the *Roanoke Times* was taken from the BI website, in place of the information provided to the *Roanoke Times* by the OVPRI. Virginia Tech rarely reports a total award portfolio. About 110 million was reported, and it was assumed that this was 110 million out of Virginia Tech's full 220 million HERD reported data. The HERD reported data is the annualized expenditure level for the institutes and colleges, Biocomplexity awards accounted for 13 million out of 272 million (total competitive expenditures) at Virginia Tech's total portfolio. Also, much of BI's expenditures will remain at VT because many awards include remaining Virginia Tech faculty as co-PIs (about 25 awards). To date approximately 50 research faculty have transitioned to UVA or other opportunities. The transition is largely complete at this point.

- Re-envisioning the Institute with next steps. Cal Ribbens, Patricia Dove, and Theresa Mayer are conducting a listening tour to meet with stakeholder groups - Deans, Associate Deans for Research, faculty stakeholders, faculty senate; other groups. At these meetings, they hope to hear feedback and thoughts on:
 - a) Understanding perceptions about integration between university and institutes
 - b) Interests in high level themes for the institute's next iteration
 - c) Happy to share notes from these meetings with COR the meetings bring up many ideas and opportunities for research
 - d) Wrapping up at end of year
- 3. Re-envisioning
 - Areas of greatest opportunity to achieve goals of programs to compete for; types of scholarly activity; strengthen integration of institutes with colleges
 - b) Take a look at the 13005 policy in relation to this
 - c) Slow things down to make a thoughtful decision for VT
- 4. Actively working with UVA to transfer grants and projects
- 5. High-performance Computing (HPC) facility is staying? Yes
- 6. Facilities
 - a) HPC facility, sequencing facility
 - (1) New data center was just brought online recently with HPC system that was donated by NASA; was used very heavily by one contract that transferred. The team that supports this system has decided to stay. Interested in exploring how this integrates more closely with ARC. If you have feedback related to this, please share. Will continue to subsidize but need to look at cost recovery. Anticipate

trying to make the system affordable; these systems are open to external users who pay the full rate, which helps with cost recovery.

- 7. Does SCHEV have any part to play in this event regarding BI faculty move to UVA?
 - a) State leadership is involved in looking at how this process happened.
- B. Center update T. Mayer Research division did receive a letter of intent for a center in Civil and Environmental Engineering a college level center; OVPRI reviews letters and proposals; this has moved on so they're working on a proposal to bring to the Commission in the next 2 meetings.
- C. AAU/APLU Data Workshop and proposed charge for: (1) an Advisory Group and
 (2) A COR Public Access to Research Data Committee A. Ogier, P. Layne, V.
 Pannabecker
 - 1. Virginia Tech had representative attendance at the AAU/APLU workshop
 - 2. Goal of the workshop to promote sharing and increasing public access to research data (regarding data that makes sense to share, that can/is allowed to be shared (in accordance with privacy/protocols) to assist with science and scholarship)
 - 3. Expectations of research institutions
 - a) From the Association of American Universities (AAU) and the Association of Public and Land-Grant Universities (APLU) Public Access Working Group recommendations, "In light of governmental mandates and the scientific benefits of making data accessible to the public, universities will need to adopt new institutional policies, procedures, and approaches that actively support and promote research data sharing, while at the same time ensuring rigor in the research process and the veracity of its intellectual outputs."
 - b) Not about monitoring rigor or requiring all data to be shared
 - 4. Mandates and Benefits see slide 3 for more
 - a) OSTP 2012 policy memo re: data sharing, defined data
 - b) Funders, journal requirements
 - c) Benefits increases use of data gathered for research studies and possible meta-analyses, economic growth, integrity of scientific record.
 - 5. Barriers see slide 4
 - a) Communication, policies, training on curation/documentation processes; incentives are varied; time commitment.
 - 6. Projected Committee Deliverables
 - A report of services and support available to support researchers who need to share their data, including examples of datasets that have been shared by VT researchers.

- b) A review of relevant policies at Virginia Tech that govern researchers' ability to share their data.
- c) A review of Data Management Plans (DMPs) from active research studies tracked by Office of Sponsored Programs, which considers the feasibility of compliance with submitted DMPs.
- d) A recommendation document addressing how Virginia Tech should move forward to better support researchers in sharing their data.
- 7. Questions
 - a) "The data here means raw data, I assume?" It depends on the project, this may mean raw, processed, or other forms of data.
 - b) In the list of barriers, potential IP is a major barrier and that time aspect is very formidable to get that prepared
 - (1) Data sharing can be from 6 months to two years or other time periods that meet funder / researcher requirements
 - (2) Sometimes people want to share right away, ahead of publishing, some want to share later on when publishing
 - c) Feel there is a need for guidelines to make younger faculty aware of possible repercussions of sharing data early
 - d) File size, formats what is considered data? Images? Yes, anything that underlies research - text, images, audio, software code, scripts that may be run; anything that happens outside a peer-reviewed, published article that is not included in that article could be data
 - e) Time and Return on Investment what if you put in all this time to curate a dataset and then no one ever looks at it?
 - (1) Frequent answer is that we don't know how useful the data will be; a reasonable time investment is worthwhile to make it available for the long tail of data research
 - (2) <u>VTechData repository</u> offers DOIs so can track and see usage and citation of datasets
 - f) Documentation will be important to accompany a dataset to be sure that data is used responsibly later on. If you don't know how much was missing from a sample, etc., conclusions may not be valid. Other examples include keeping measurement information, materials, etc.
 - g) Publishing data and supplementary materials is becoming more and more common - to address issues - include example of how the work was conducted (along the lines of <u>JOVE (Journal of</u> <u>Visualized Experiments</u>) that shows procedures
 - <u>Open Science Framework</u> is another tool available to the Virginia Tech community to track, document, and share research project information (can be private or public)

- h) Comment: Presentation mentioned AAU as a source of standards
 does meeting these standards inch us closer to meeting AAU status?
- i) Concerns about quality control as peer review is not (commonly) included in dataset sharing; is there an implication that the library endorses the datasets within VTechData? No, the datasets are not reviewed; the library does not manage the quality or guarantee the quality. Peer review of data sets is something that funders and publishers are talking about. Some journals provide 'data papers' as an option to publish a detailed description of a dataset, and these papers may be peer reviewed. (Example, <u>Scientific Data</u>, a Nature journal)
- 8. Motion to create a Public Access to Research Data Committee via COR to investigate this topic. S. Mostaghimi motioned and D. Miller seconded. Vote approved creation of the committee.

VI. [4:55] Adjournment

*Please take note of the following upcoming meetings which will all take place in Burruss 130 from 3:30pm-5:00pm unless otherwise noted:

9 January 2019 13 February 2019 13 March 2019 10 April 2019 8 May 2019

Supporting Public Access to Research Data

Andi Ogier Director, Data Services University Libraries

Presentation to the Commission on Research, Virginia Tech, on December 12, 2018

From the <u>Association of American Universities (AAU) and the Association of</u> <u>Public and Land-Grant Universities (APLU) Public Access Working Group</u> <u>recommendations</u>:

"In light of governmental mandates and the scientific benefits of making data accessible to the public, **universities will need to adopt new institutional policies, procedures, and approaches that actively support and promote research data sharing**, while at the same time ensuring rigor in the research process and the veracity of its intellectual outputs."

Mandates

Benefits

Federal and Private Funding

https://www.nsf.gov/bfa/dias/policy/dmp .jsp

Federal Agencies

Accelerate the pace of discovery and fuel innovation

Potential for re-use and meta-analyses

Potential to grow the economy

SparcOpen Article and Data Sharing Requirements by Agency

http://datasharing.sparcopen.org/

Academic Journals (Nature, Science, PLOS, PNAS)

Improve integrity of scholarly/scientific record

What are the barriers to research data sharing?

- Communication
- Policies
- Training on curation/documentation processes
- Incentives
- Time

What resources does VT have to lower these barriers?

Charge a Committee to investigate and deliver:

- 1. A report of services and support available to support researchers who need to share their data, including examples of datasets that have been shared by VT researchers.
- 2. A review of relevant policies at Virginia Tech that govern researchers' ability to share their data.
- 3. A review of Data Management Plans (DMPs) from active research studies tracked by Office of Sponsored Programs, which considers the feasibility of compliance with submitted DMPs.
- 4. A recommendation document addressing how Virginia Tech should move forward to better support researchers in sharing their data.



Agenda

COMMISSION ON RESEARCH

February 13, 2019 130 Burruss Conference Room 3:30pm-5:00pm

COR Documents available to COR members in Team Drive: COR FY2018-2019

Attended:

Members: Virginia Pannabecker, Stefan Duma, Robert (Bobby) Vance (for Elizabeth Grant), Lijuan Yuan, R. Bruce Vogelaar, Marie Elisa Christie, Nancy Dudek, Shuo Geng (for Liwu Li for John Phillips), Nicholas Brown, Ken Miller, Kevin McGuire, Saied Mostaghimi, Dipankar Chakravarti, Deborah Milly, Rajaram Bhagavathula, Uri Kahanovitch, Randy Heflin (for Sally Morton), Alan Michaels

OVPRI: Theresa Mayer, Laurel Miner, Diane Zielinski

Presenters: VT-FAST representatives: Janet Webster, Associate Director of Finance and Administration, Fralin Life Science Institute and Jon Greene, Director for National Security and Program Development, Institute for Critical Technology and Applied Sciences

- I. Approval of the Agenda
 - A. Motion to approve by S. Mostaghimi, second by Alan Michaels
 - B. Approved by majority vote
- II. Approval of December Minutes
 - A. Approved via email
- III. Announcements
 - A. Faculty & Staff Awards
 - B. <u>University Ombuds Office director search</u>
- IV. [3:35] Unfinished Business
 - A. Report of Ongoing Activities
 - 1. Committee on Research Competitiveness S. Duma
 - a) Finished data collection. Finished a draft and will have a report for the next meeting.
 - Looked at about 40 schools (viewed online information for all, called people at about 20 schools to get further information). Used the HERD list.
 - 2. University Library Committee V. Pannabecker

- a) No report.
- 3. Faculty Senate B. Vogelaar or B. Britt
 - a) Had discussion about governance. Working on resolutions modifying Faculty Senate Constitution related to to re-election of representatives to faculty senate. Related to term limits.
- 4. Update to Policy 13005 A. Michaels
 - a) Preparing for first reading of resolution to update policy 13005
 - b) Draft policy is being circulated for initial feedback
- 5. Open Access Policy update K. McGuire
 - a) Met once this semester and developed a new presentation
 - b) Faculty Senate presentation on March 8th and will have University Counsel with us for that presentation
 - c) Looking to be at CFA as well for the updated presentation this spring
 - d) Beginning the week of January 28th, there is sometimes a campus notice, "<u>Virginia Tech Commission on Research proposes new</u> <u>faculty policy to make Virginia Tech scholarship publicly available</u>," posted at the end of VT News tables of contents.
 - (1) Please circulate this to your constituents so they're aware of this and can provide feedback or questions
 - (2) K. McGuire sent to CNRE faculty who were interested led to scheduling an open presentation and Q&A for the college. Presentations are available for any who request it.
 - (3) Comment: may be able to announce this notice in the Associate Deans for Research meeting
- 6. Public Access to Research Data V. Pannabecker / COR committee representative
 - a) COR members: Elizabeth Grant and Raj Bagavathula will represent COR
 - b) Update on committee progress will be provided in May
- 7. Software Review Backlogs update V. Pannabecker
 - a) No report. Commission on University Support is scheduled to hear a presentation about this at their next meeting in February.
- B. OVPRI Update T. Mayer or L. Miner
 - 1. HERD report:
 - a) Federal portfolio was up a little over 8%; Industry support up about 8%; Overall increase of 1.2%; Institutional support dropped
 - b) Monitoring our competitive portfolio
 - c) Significantly above the average across the country
 - d) Increase in federal competitive awards and increase in Industry

- 2. New hires
 - a) New Associate Vice President for Sponsored Programs Trudy Riley, began on Jan 7th - <u>see VT News story of November 14</u>, <u>2018</u>. Leads the sponsored programs team in the Office of the Vice President for Research and Innovation, which is responsible for the full array of pre-award, contracting, and post-award functions.
 - b) New Associate Vice President David Schabdach began January 7th - <u>see VT News story of October 1, 2018</u>. Serving as the attending veterinarian and directing the university program for laboratory animal resources in the Office of the Vice President for Research and Innovation.
 - c) New opportunities to engage faculty in initiatives
 - Re-establishment of Faculty Fellows program in OVPRI -25-50% positions to focus on special initiatives; Limited time appointments (2-3 years). See <u>VT News Story of</u> <u>February 22, 2019</u>.
 - (a) First fellow identified: Robin Queen, Associate Professor of Biomedical Engineering and Mechanics - working on health data privacy and developing university-wide data security infrastructure for research associated with human subjects; key connections with Carilion; small working group with faculty to ensure investments meet our institutional goals and values.
 - (b) Other areas of high priorities: soliciting nominations (call has gone out to associate deans for research and others):
 - (i) Shared User Laboratories
 - (a) Ex: more integrated sequencing / mass spectrometry facilities; hard materials; renewal coming up for NSF NNCI infrastructure site grant reinvest in analytical facilities and look at materials categorization needs
 - (b) What will the user experience be like? How will this work? → this is what the faculty fellow/s will be working on; looking at models that exist; including looking at a software platform for scheduling instruments,

invoicing internal and external users, etc.

- (c) Shared facilities are not likely to break even, have to look at subsidizing to ensure needed investment in these facilities
- (d) Quantum Science / Quantum Engineering: explore whether VT is in a position to spearhead an investigation activity that would require more significant nanofabrication facilities
- (e) Side note: equipment trust fund increased emphasis on us communicating to state leaders how we're investing in ensuring cross institutional use and efficiencies
 - There is a bill under consideration that would pull a section of this fund to make a chunk of this fund under a new authority that we would have to competitively bid for and show how it's useful for the state.
- 3. Biocomplexity Institute Next Steps
 - a) Phase 1 was a listening tour; talked with about 75 faculty plus faculty senate, other stakeholders; integrating feedback towards new plans regarding:
 - (1) Model of institute previously soft-funded may be mixed in the future
 - (2) Thematic areas what has worked well / where has there been tension?
 - (3) Will share main points when summarized
 - (4) Key question: understanding what resources we have to reinvest space, facilities, dollars that have been freed up
 - b) Question: Any timeline in mind? Response: Based on feedback (and after verifying no constraints from previous state legislation that initiated the institute), converging on a new model; working on the financial model to move away from pure soft money model to one that is more integrated with the colleges; working on writing this up to bring to COR and others.

- V. [4:15] New Business
 - A. VT-FAST (Faculty Activity Support Team): https://fralin.vt.edu/fast.html
 - 1. [Slides attached at end of these minutes]
 - Presenters: Janet Webster, Assoc Director of Finance and Administration, Fralin Life Science Institute and Jon Greene, Associate Director for Strategic Planning and Development at Institute Critical Technology and Applied Science. Both support proposal development and more for VT-FAST.
 - 3. Overall, VT-FAST supports faculty in proposal development: "Allowing researchers to focus on research"
 - 4. Virtual team launched in Fall 2018: Pulling together those who help with proposal development across the university so people can talk and meet
 - 5. Support pre and post award; take care of a lot of admin tasks; help identify forms needed, etc. Support to identify some options for outreach
 - 6. Not sure what to do for a portion of your proposal? Ask VT-FAST
 - 7. Questions
 - a) Geared towards 'positional funding avenues'? What about corporate funding? Do you interact with them? Yes, some with foundation. Yes, work with industry too, but at lower scale than LINK; LINK is more higher level industry collaboration
 - (1) We have 2 major Focus areas
 - (a) Junior faculty getting started
 - (b) Large collaborative grants that are limited submission grants
 - b) What about combo corporate / federal grants? Members of a number of DOD consortia that do this type.
 - (1) Additional comment: many DOE and DOD involve a tech commercialization pathway with a transition partner; this is usually supported by <u>LINK: Center for Advancing Industry</u> <u>Partnerships</u>; proposal is done as more of a federal proposal after corporate relationship is built (w/help from LINK)
 - c) So, if I need help, but can't tell which individual to ask what do I do? For general inquiries, contact Janet or Jon
 - (1) Share workload between FAST group; and FAST group can ask other FAST members for help
 - (2) On the about page, you can see Janet and Jon's emails.
 - d) Some colleges have specific people that they'll notice when they look at this VT-FAST list of supporters; have you gotten questions / asks from people outside these areas? Yes, for example, Janet would usually would support 45 proposals per year, have now hit 45 proposals in 6 months so have doubled work. Worked together

with a group to do a large grant this year - this approach really helps with large, collaborative grants.

e) Would it make sense to provide links to VT-FAST elsehwere? Such as on the OVPRI site, or elsewhere? Good idea.

VI. [4:55] Adjournment

*The following are the remaining upcoming meetings for 2018-2019 which will all take place in Burruss 130 from 3:30pm-5:00pm unless otherwise noted:

13 March 2019 10 April 2019 8 May 2019





INSTITUTE for CRITICAL TECHNOLOGY and APPLIED SCIENCE Virginia Tech

VT-FAST

ALLOWING RESEARCHERS TO FOCUS ON RESEARCH

JON GREENE AND JANET WEBSTER

What is VT-FAST?

- Virginia Tech Faculty Activity Support Team
 Formed in 2018.
- Is a virtual team of faculty and staff across campus who support proposal development from single investigator to large teams with external partners.
- Goal is to facilitate all aspects of proposal development and submission so that the researcher can focus most of his/her efforts on the actual proposal.

How Can VT-FAST Help You? Key Sections of the Application:

Project Summary

Project Narrative

References

Facilities and Other Resources

Equipment

Other Attachments

Introduction

Specific Aims

Research Strategy

Inclusion Enrollment Report

Progress Report Publication List

Protection of Human Subjects Inclusion of Women and Minorities Targeted/Planned Enrollment Table Inclusion of Children Vertebrate Animals Select Agent Research Multiple PD/PI Leadership Plan Consortium/Contractual Arrangements Letters of Support Resource Sharing Plan(s) Appendix

Virginia Tech Faculty Activity Support Team VT-FAST (organized through ICTAS & Fralin)

- Facilitates proposal preparation, allowing faculty to focus on research plan documents
- PreAward Help
 - Strategy
 - Coordinate meetings
 - Develop supporting material
 - Budget development
 - Graphics
- PostAward Help
 - Project Management
 - Annual report
 - Schedule/manage meetings

- Putting together teams
- Time Management
- Summit and Cayuse
- Data Tables
- Internal Reviews
- Working with subcontractors

- Sponsor engagement
- Broader impacts
- Technical editing, proofreading and formatting
- Management plans
- Cost share

- Tracking cost share
- Editing journal articles
- Publicizing success

- Tracking budget/Rebudgeting
- Managing subcontractors
- Talks and posters
- Contact Janet Webster (jbwebste@vt.edu) or Jon Greene (greenej@vt.edu)





Who Are We?

How Can You Get Help?

https://fralin.vt.edu/fast.html

Questions?



Minutes

COMMISSION ON RESEARCH

March 13, 2019 130 Burruss Conference Room 3:30pm-5:00pm

COR Documents available to COR members in Team Drive: COR FY2018-2019

Attended:

Members: Virginia Pannabecker, Alan Michaels, Elizabeth Grant, Lijuan Yuan, R. Bruce Vogelaar, Liwu Li (for John Phillips), Nicholas Brown, Kevin McGuire, Dipankar Chakravarti, Rajaram Bhagavathula, Uri Kahanovitch, Randy Heflin (for Sally Morton),

OVPRI: Theresa Mayer, Laurel Miner, Diane Zielinski

Presenters:

Commonwealth Cyber Initiative: Charles Clancy, Executive Director, Hume Center for National Security and Technology and Interim Executive Director, Commonwealth Cyber Initiative (CCI); and Gretchen Matthews, Professor, Department of Mathematics, and CCI Blacksburg Node Lead

Proposal for new Center for Infrastructure Delivery Excellence: Michael J. Garvin, Associate Professor, Department of Civil and Environmental Engineering

Guests: Peggy Layne

- I. Approval of the Agenda
 - A. Motion by E. Grant. Seconded by K. McGuire. Approved by voted.
- II. Approval of February Minutes
 - A. Approved via email
- III. Announcements
 - A. Governance 101 resource via University Council Resolution process and help documentation: <u>https://governance.vt.edu/</u>
 - B. Additional Policy Development resources: https://policies.vt.edu/policy-development.html
 - C. Call for COR Vice Chair nominees
- IV. [3:40] Unfinished Business
 - A. Report of Ongoing Activities

- Due to room scheduling / access issue, tabled all monthly reports until April
- B. OVPRI Update T. Mayer or L. Miner
 - 1. Presentation at Faculty senate Sponsored Programs
 - a) Introduction of Trudy Riley, new Associate Vice President for Research and Innovation, Sponsored Programs
 - b) Summary of survey results on Sponsored program issues and things that are going well
 - (1) Survey is preliminary assessment
 - (2) Looking for and reaching out to departments and others around campus for feedback on OSP processes, etc.
 - 2. VT News announcement start of research office faculty fellows
 - a) Robin Queen is first faculty fellow health data privacy and security, partnership with Carilion
 - b) Next 3 fellows will focus on
 - (1) Space, capital equipment purchases, maintenance, staffing, etc. shared facilities
 - c) Working group around research computing multiple stakeholders involved in this working group
 - (1) Do you have interest/faculty stakeholders who might be interested in this group, let OVPRI know!
 - (2) This is addressing an issue that came up through COR and faculty senate
 - Fellows and Working Group on research computing are addressing university-wide shared laboratories ('service centers')
 - These groups will work in OVPRI and provide connections out to and between departments and other areas around campus
 - e) New building coming online RV1311 in CRC justified on basis of growth and certain restricted portfolio of research (ITAR export and other restrictions related to integration with programs on campus). Major group is the Hume center. There was an open solicitation to colleges to ask about programs aligned with the building. Laurel is coordinating. The new building will have some flexible hotelling space for short term needs testing this out as a model. There will be ongoing evaluation of the programs in the building to ensure optimal usage and inclusive practices.
- V. [3:55] New Business
 - A. [3:55] First reading of revision to Policy 13005, Centers and Institutes: Establishment, Governance and Programmatic Oversight -- A. Michaels

- Three documents available in the COR Team Drive Clean version of Proposed 13005 revision, Tracked changes version of proposed revision of 13005, Summary of Changes made in the proposed revision
- 2. Goal of revisions: bring the policy in line with current practices; not a substantive update or change to how centers/institutes are chartered; rather a simplification of the text, including the description of the periodic review process
- 3. Based on feedback from current center/institute directors, removed any changes adding DAs or labs as this would require more discussion to define these terms and understand their relationship to the policy
- 4. Will consider substantive changes in Fall next year
- 5. Changes Summary
 - a) Clarifications throughout document:
 - (1) Updated/proper titles for university leadership and their roles
 - (2) Consolidation of titles to improve readability (e.g., reduction from 69 instances of "Vice President" in the document)
 - b) Section 1.0 Purpose
 - (1) The simplified concept for organizational entities (multiple instantiations of Centers, ranging from Department-level and Institute-level Centers to University-level Centers, and University Institutes) is introduced. That change, which allows consolidation of subsequent common language, improves overall clarity of the document and reduces ~3 pages of text from the Policy.
 - (2) Duplicative cross-reference to Policy 3020 (Centers and University Institutes Financial and Administrative Policies and Procedures) is removed from Section 1 (Purpose) and consolidated to a single reference in Section 2 (Policy).
 - c) Section 2.0 Policy
 - (1) Clarification of titles and consolidation of reference to Policy 3020
 - d) Section 3.0 Procedures
 - (1) Description of process to establish a new centers; largely consolidation of language via a new diagram that traces a center from establishment/letter of intent through periodic reviews, and optionally to termination
 - e) Section 3.1 Establishment of New Centers and University Institutes
 - (1) Consolidation of establishment procedures with clarifications of distinctions between different level entities.

- (2) Clearer roles & responsibilities and decision flows during the establishment and review process; clarified review and recommendation role of new proposals by the appropriate commission (Research, Instruction, Outreach)
- f) ·Section 3.2 Governance
 - (1) Incorporated a graphic that summarizes roles and responsibilities during ongoing *center* activities, including record retention responsibilities and periodic reviews.
- g) Section 3.3 Financial and Administrative Procedures and Responsibilities

(1) No substantive changes

- h) Section 3.4 Administrative Oversight and Periodic Review & 3.5 Programmatic Oversight and Evaluation Aspects of Centers and University Institutes
 - (1) Consolidated repetitive discussion of review for Centers and their leadership; simplified description of review process, leaving scope and details of the review to Stakeholders Board and optional Advisory Board. Details of the annual review process and 5-year re-evaluations are summarized in graphic added to Section 3.2.
- i) Section 3.6 Termination or Realignment
 - (1) No substantive changes
- j) Section 4.0 Definitions
 - (1) Formalized the ongoing practice of centers being permitted to adopt an organizational name that reflects the preferences of the faculty or norms of the academic discipline.
 - (2) Added a summary table to clarify anticipated membership of centers operating at different organizational levels within the university. Note that this membership is not prescriptive, but rather "typical."
- k) Section 5.0 References
 - (1) Removed unused
- I) Section 6.0 Approvals and Changes
 - (1) Incorporated subset of this document as a change summary for Revision 4
- 6. Questions? / Comments
 - a) Clarification you mention some things were approved 6 years ago - are those already in this current policy or is that what you're proposing now? ⇒ Those are in the current policy
 - b) Great job of streamlining and like addition of diagrams and table
 - c) Definitions In "Section 4.0 Definitions," I think it would be valuable to retain (rather than the proposed deletion) the phrase

"contained within a single college, or two or more colleges" from the definition of "College Center." Without that phrasing, I think many will interpret the definition of a college center as only allowing faculty within that college.

- d) In Section 3.4, I think it's constructive to remove most of the language that is deleted in the proposed revision. I do believe that retaining the nine typical questions for the review to address (which were at the end of that section) would be useful as it does help frame the nature of the review without being overly prescriptive. Some guidance as to the typical membership of the review committees might also be helpful, although I agree that the prior language was overly constraining.
- e) One other key question that arose while reading the revision is that, while allowing the use of names other than "center" is going to be quite constructive, there will need to be further guidance on what terms are allowable and whether some are specifically precluded (e.g. institute). As Dr. Mayer pointed out, that discussion can occur outside of this particular revision of the policy. But it will probably need to be addressed in the fairly near future as new centers with other possible designations are proposed.
- f) University center term not something we've had in the past; only institutes were university level, all centers had to be dept or college - is this actually a new policy / practice?
- g) Like that centers don't have to use term 'center' but this does raise question (not necessarily policy but something for OVPRI to consider) - what are the terms that can be used? Can orgs that don't go through this policy be called 'centers'?
- h) Some of these questions may be better to move to the future focus on revising this at an institutional strategy / substantive level ; including engaging multiple commissions in revising this document in future; perhaps including for those on loss of content
- B. [4:10] Commonwealth Cyber Initiative (CCI) Charles Clancy, Executive Director, Hume Center for National Security and Technology and Interim Executive Director, Commonwealth Cyber Initiative.
 - 1. See mission, slides
 - 2. Many cybertechnology / startups need partnerships, collaborators especially at the start looking to provide infrastructure to support these startups in a collaborative way through nodes throughout the region
 - 3. DC and Maryland, thousands of cybersecurity jobs and huge gap in workforce trying to address this need as well

- 4. Hub in Northern VA; VT is the anchor of this; 10 million per year for hub; nodes in southeast, southwest, elsewhere; funding for these as well; RFP for these was just approved
- 5. 5M for capital funding, 1M already drawn down; could be more funding available if needed via the Virginia Research Investment
- 6. VRIC Virginia Research Investment Committee oversees CCI and provides funding and feedback and assessment; see slides on other groups governing this process
- 7. Leadership within the hub; hiring Executive Director administrative professor line with option for tenure in academic dept
 - a) See slides for roles of hub and node leaders
 - b) Network office for programming, outreach, extension, metrics, assessments, etc.
 - c) Positions will be a combination of new and existing positions
 - d) All these together will comprise a leadership council
- 8. Facilities
 - Based at VT research center in arlington to start; about 13,000 sq feet
 - b) Hub residency requirement
- 9. Hub Budget
 - a) 3.1M for leadership and program activity and support staff
 - b) 1.5M for facilities and operations
 - (1) Sharing resources with Hume Center some of this funding will augment resources of Hume for joint positions
 - c) 5.4M for research programs
 - Investing in faculty to build programs those bringing in certain amount of funding per year who have the capacity to create these larger programs
 - d) Looking for a 3:1 return on investments
- 10. HubBudget detail is in slides
- 11. Node business model will be different
- 12. Goal: build critical mass of research, tenure-track, tenured faculty with team of 50-70 junior researchers, 100-150 doctoral students with goal of extramural funding
- 13. A lot of questions; hiring happening, existing faculty; figuring out if faculty line will come out of this or not; working on bylaws of the CCI hub that would nail this down w/faculty position agreement
- 14. See slide with 3 faculty who will start
- 15. Searches underway in ECE 2 people; may work with other areas
- 16. See slides on Node commitments, certification, structure
- 17. If you're interested, go to this link: <u>https://vt.edu/cci-blueprint/index.html</u>. Get more details and you can provide more feedback / ask questions
- 18. More of this will come into shape as it's designed

- 19. Questions:
 - a) How will this budget model work? Espcially for pre-tenure faculty? (Mainly looking for post tenure or research faculty for this)
- 20. Q: There is 1 hub, 4 or 5 nodes? Yes; This is through VT but it is a state initiative? Yes, it's a complex initiative with multiple partners
- 21. Q: what about 10 years from now what will these faculty be doing? Planned that faculty will act as consultants, supporting development of new companies each year.
- C. [4:45] New Center Proposal discuss and vote on recommendation for proposed new research center, "Center for Infrastructure Delivery Excellence." - Michael J. Garvin, Associate Professor, Department of Civil and Environmental Engineering
 - 1. Discussion regarding access to data provided by center, especially possible open access to public
 - 2. Following discussion, a motion was brought to vote on recommending the proposed new research center, "Center for Infrastructure Delivery Excellence" contingent on a further discussion of the financial model
 - a) A. Michaels motioned , R. Heflin seconded
 - (1) Approved contingent on a discussion of the financial model
- D. Announcement Theresa forwarded an article about foreign influence and research processes, compliance to Ginny who will send this out to COR
 - 1. Need advocacy from the community please share with your areas
- VI. [4:55] Adjournment
 - A. R. Heflin motioned; R. Bhagavathula seconded; Approved by vote

Commonwealth Cyber Initiative Update

Presentation to Commission on Research March 13, 2019

Mission

The Commonwealth Cyber Initiative shall be established to serve as an engine for research, innovation, and commercialization of cybersecurity technologies, and address the Commonwealth's need for growth of advanced and professional degrees within the cyber workforce.

Structure and Resources

CCI is a **Hub** in Northern Virginia operated by Virginia Tech that connects to a network of **Nodes** across the state operated by teams of colleges and universities with industry and other partners.

Hub Funding

\$10M per year for facilities, research, innovation and entrepreneurship programs, and operations

Network Funding

\$10M per year for faculty recruiting, equipment, facilities, and scaling

Capital Funding

\$5M for facilities and equipment

Governance

VRIC

Source of funding for CCI programs, ensures accountability, and provides critical assessment and feedback for CCI

External Review Panel

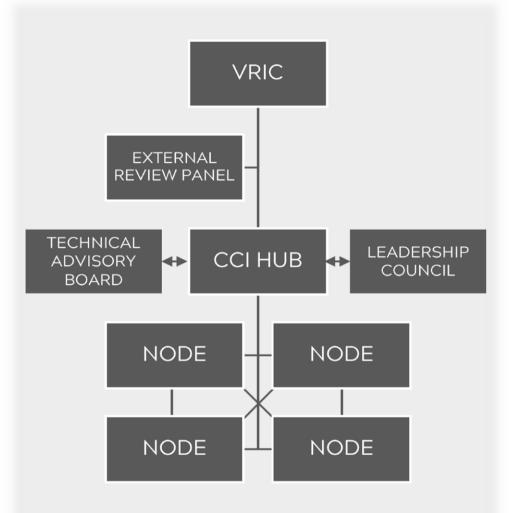
Technical experts providing independent review of progress against goals annually, reporting finding to VRIC

Technical Advisory Board

Leaders from industry and government providing advice and guidance on strategic direction of VRIC

Leadership Council

Hub/node leadership members; develops policy and budgets, advices on programs, reviews metrics, creates roadmaps



Leadership

Executive Director

World-class cybersecurity scholar with significant leadership acumen and track record of success; tenured administrative professor

Isaacson Miller retained to manage the search; committee involves members from across the state

Managing Director

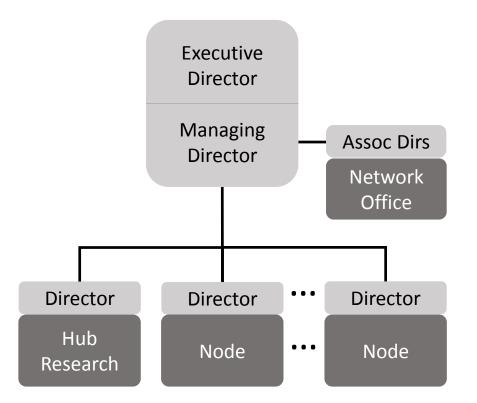
Operationally-focused manager who oversees network programs

Hub Research Director

Faculty director who provides a leadership for programmatic research investments at the hub

Node Directors

Lead activities of each of the nodes



Hub Facilities



Initial Location

Virginia Tech Research Center – Arlington 900 N. Glebe Rd, Arlington, VA 22203

Hub Layout

8,000 SF of space on the 3rd floor will be dedicated to hub programs, including 1200 SF co-working area, 600 SF lab, 17 offices/workspaces.

5,000 SF of space on other floors will also support hub programs.

Hub Residency

To receive hub funding, research programs must be physically resident within the hub building.

Long-Term Location

Program needs will ultimately dictate the size and scope of facilities requirements. Projections indicate the need for new or expanded facilities in FY22 (25,000 SF) growing further in FY25 (50,000 SF)

Hub Budget (1)

Approach

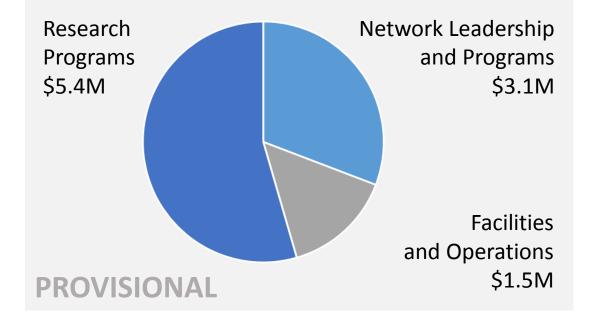
Divide budget into three segments:

- CCI leadership and network-wide program activity
- Facilities and operations that support all activities across the hub
- Investments in research programs

Budgeting

Leadership/network and facilities/operations operate under a "hard money" model with budgets adjusted annually through the Leadership Council.

Research program investments made seeking 3:1 steadystate ROI under the leadership of "primary faculty" responsible for building programs that support the hub mission.



Hub Budget (2)

Network Office		Hub Operations	
Personnel – 11.0 FTEs	\$1,836,516	Personnel – 6.0 FTEs	\$742,274
Leadership — Exec Director, Managing Director Associate Directors — Edu/Wkfc, Innov/TC, Outreach Program Support — PgMgr, PgAnalyst, EA		Assistant Directors — Personnel, Comms Program Support — Graphics/Web, Web Dev Fiscal — Fiscal Tech, PreAward	
Marketing, Events, Recruiting	\$539,000	Facilities	\$663,936
Internships	\$660,000	\$660,000 27 Offices	
Operating	\$44,000 10 Cubes		
Total	\$3,079,516	3 Labs (1200 SF) Flex Zone (1200 SF)	
		Operating	\$66,000
		Total	\$1,472,210

Hub Budget (3)

Research Program Investment Approach

Invest in primary faculty to build teams of researchers and students, leading to external funding, publications, and commercialization.

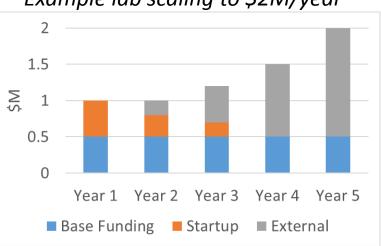
Approach seeks to recruit entrepreneurial faculty interested in building large, impactful programs, and giving them the resources to succeed.

Performance metrics assessed annually to determine any needed adjustments (up or down) to base funding.

FY20 Research Budget – \$5,448,273

Six primary faculty planned for FY20:

- \$1.8M base funding (recurring)
- \$3.6M startup funds (one-time)



Example lab scaling to \$2M/year

Aggregate Impact (2026+)

15-20 primary faculty 50-70 junior faculty/researchers 100-150 PhD students \$20M/year in external funding

Hub Primary Faculty



Laura Freeman

Research Associate Professor Statistics & Hume Center Area: cyber test science



Wenjing Lou

W. C. English Professor Computer Science Area: wireless/cloud security



Jerry Park

Professor Electrical and Computer Engineering Area: wireless/IoT security



Approach: Invest in a team of primary faculty who will build research programs that lead to innovation and impact

- Three existing faculty identified as primary faculty, with the expectation of scaling up their current programs
- Searches underway for two tenured positions that would start in August 2019 to expand the team
- At full capacity, anticipate a total of 12-18 primary faculty each managing teams of junior faculty, research staff, postdocs, and graduate students



Commonwealth Cyber Initiative Instructions for Application for Certification of Regional Nodes

VRIC Meeting Date	Certification Application Package Due
June 11, 2019	Tuesday, April 30, 2019, 11:59 p.m.
August 13, 2019	Tuesday, July 2, 2019, 11:59 p.m.
October 8 2019	Tuesday, August 27, 2019, 11:59 p.m.
December 10, 2019	Friday, October 25, 2019, 11:59 p.m.



VIRGINIA RESEARCH INVESTMENT COMMITTEE

Node Structure

Nodes involve two or more institutions of higher learning, with network of regional partners. Up to four nodes will be initially certified.

Node Certification

Node certification is based on commitment to and alignment with CCI research priorities, cyber workforce development, and building regional ecosystems.

Expect nodes to all be certified by the end of 2019.

Node Commitments

Certified nodes commit to enrollment growth and institutional investment to match funds received via the Virginia Research Investment Fund (VRIF).

Network Programs – Initial Progress

Network Programs			
Network Portal	Domain cyberinitiative.org registered; planned staffing for web development		
Entrepreneurship Programs	Planning Assoc Dir position focused in innovation/commercialization; developing partnership with Mach37 for program collaboration		
Market Research	Part of network office staffing plan		
Curriculum Alignment and Normalization	Planning Assoc Dir position focused in education/workforce		
Holistic Industry Partnership Development	Planning Assoc Dir position focused in outreach		
Workshops and Showcases	Planning Assoc Dir position focused in outreach; Spring'20 event envisioned		
Faculty Recruitment and Support			
Research Active Faculty Support	Senior tenured computer engineering faculty search underway for hub; research faculty searches starting in April		
Faculty Recruitment	New VRIC/SCHEV guidance on node funding		
Faculty Support	New VRIC/SCHEV guidance on node funding		
Internships			
Co-Op 2.0 Intern Stipends	Planning Assoc Dir position focused in education; Summer'20 cohort envisioned		

Research Programs – Initial Progress

5G/IoT Security

Leveraging FY19 capital funds to build 4G/5G core network to connect to future testbeds at Nodes

Engaging with emerging multi-\$B national initiative on 5G to make CCI the platform for security research

AI/ML and Security

Leveraging FY19 capital funds to acquire DGX-2 GPU platform for use by CCI network

Significant increase in defense research interest in AI/ML assurance and AI/ML for cyber that can have major commercial applications

Leveraging existing federal partnerships for early program development

MITRE University Innovation Exchange (UIX) – GMU, JMU, ODU, UVA, VSU, VT, W&M DOD Systems Engineering Research Center (SERC) – ODU, UVA, VT Senior Military College (SMC) Cyber Institutes – VMI, VT

Summary of Proposed Changes to Policy 13005, "Centers and Institutes: Establishment, Governance and Programmatic Oversight," 3/7/2019

This documents captures a section-by-section change log and rationale for the changes proposed to Virginia Tech's Policy 13005. These changes are primarily intended to serve as a clarification of the current policy, correcting titles and removing duplicative language; where possible, repetitive language common to both Centers and Institutes has been consolidated under a common entity descriptor *"Center."* Descriptive policy diagrams have been incorporated to describe the process for establishing and performing periodic reviews of Centers and Institutes. A future revision will be considered from this proposed update with more sustentative changes.

- Clarifications throughout document:
 - Updated/proper titles for university leadership and their roles
 - Consolidation of titles to improve readability (e.g., reduction from 69 instances of "Vice President" in the document)
- Section 1.0 Purpose
 - The simplified concept for organizational entities (multiple instantiations of Centers, ranging from Department-level and Institute-level Centers to Universitylevel Centers, and University Institutes) is introduced. That change, which allows consolidation of subsequent common language, improves overall clarity of the document and reduces ~3 pages of text from the Policy.
 - Duplicative cross-reference to Policy 3020 (Centers and University Institutes Financial and Administrative Policies and Procedures) is removed from Section 1 (Purpose) and consolidated to a single reference in Section 2 (Policy).
- Section 2.0 Policy
 - Clarification of titles and consolidation of reference to Policy 3020
- Section 3.0 Procedures
 - Description of process to establish a new centers; largely consolidation of language via a new diagram that traces a center from establishment/letter of intent through periodic reviews, and optionally to termination
- Section 3.1 Establishment of New Centers and University Institutes
 - Consolidation of establishment procedures with clarifications of distinctions between different level entities.
 - Clearer roles & responsibilities and decision flows during the establishment and review process; clarified review and recommendation role of new proposals by the appropriate commission (Research, Instruction, Outreach)
- Section 3.2 Governance

- Incorporated a graphic that summarizes roles and responsibilities during ongoing *center* activities, including record retention responsibilities and periodic reviews.
- Section 3.3 Financial and Administrative Procedures and Responsibilities
 - No substantive changes
- Section 3.4 Administrative Oversight and Periodic Review & 3.5 Programmatic Oversight and Evaluation Aspects of Centers and University Institutes
 - Consolidated repetitive discussion of review for Centers and their leadership; simplified description of review process, leaving scope and details of the review to Stakeholders Board and optional Advisory Board. Details of the annual review process and 5-year re-evaluations are summarized in graphic added to Section 3.2.
- Section 3.6 Termination or Realignment
 - No substantive changes
- Section 4.0 Definitions
 - Formalized the ongoing practice of centers being permitted to adopt an organizational name that reflects the preferences of the faculty or norms of the academic discipline.
 - Added a summary table to clarify anticipated membership of centers operating at different organizational levels within the university. Note that this membership is not prescriptive, but rather "typical."
- Section 5.0 References
 - Removed unused
- Section 6.0 Approvals and Changes
 - Incorporated subset of this document as a change summary for Revision 4

MINUTES COMMISSION ON UNDERGRADUATE STUDIES AND POLICIES April 8, 2019 230 Student Services Building, 3:00 PM

PRESENT: M. Kasarda (Chair); V. Fowler; S. Hart for K. Goyne; S. Sumner for A. Grant; R. Holloway; L. Hoyns for M. Andrews; S. Johnson; C. Leeth; T. Hammett; R. Panneton for S. Morton; J. Orr; C. Boone for J. Ross; J. Sible; S. Tatum; D. Thorp; L. Zietsman

ABSENT WITH NOTIFICATION: K. Albright; B. Barnhill; M. Byers; S. Campos; G. Daniel; K. Edgar; K. Hosig; C. Johnson; L. Khansa; A. Knoblauch; J. Loferski; S. Metko; K. Redican; P. Tarkenton; C. Touzel; D. Wodak

VISITORS: N. Akers; S. Biscotte; G. Costello; B. Smith; R. Sparks

CALL TO ORDER

The meeting was called to order at 3:00 PM by M. Kasarda.

ADOPTION OF THE AGENDA

A motion was made and seconded to approve the agenda. The motion to approve the agenda passed unanimously.

ANNOUNCEMENT OF APPROVAL AND POSTING OF MINUTES

M. Kasarda announced the March 25, 2019 minutes were electronically approved and can be accessed via the University Registrar's website:

https://registrar.vt.edu/content/dam/registrar_vt_edu/documents/Updates/governance/2018-2019/mar25/minutes_cusp_3_25_19_rev.pdf

OLD BUSINESS:

Resolution 2018-19.C *Resolution to Approve New Major, Polymer Chemistry, in Bachelor of Science in Chemistry,* **Second Reading**

The motion was made and seconded to present for second reading Resolution 2018-19.C *Resolution to Approve New Major, Polymer Chemistry, in Bachelor of Science in Chemistry.*

M. Kasarda opened the floor for discussion on Resolution 2018-19.C.

• R. Panneton noted that the minor grammatical revisions previously suggested by the Commission had been made.

Resolution 2018-19.C has received a waiver from Faculty Senate, Staff Senate, Student Government Association, and Graduate Student Assembly.

Hearing no further discussion, a motion was made and seconded to APPROVE Resolution 2018-19.C. This Resolution will be forwarded for review at University Council.

The motion passed unanimously.

Resolution 2018-19.D *Resolution to Approve New Major, Medicinal Chemistry, in Bachelor of Science in Chemistry,* **Second Reading**

The motion was made and seconded to present for second reading Resolution 2018-19.D *Resolution to Approve New Major, Medicinal Chemistry, in Bachelor of Science in Chemistry.*

M. Kasarda opened the floor for discussion on Resolution 2018-19.D.

• R. Panneton noted that the minor grammatical revisions previously suggested by the Commission had been made.

Resolution 2018-19.D has received a waiver from Faculty Senate, Staff Senate, Student Government Association, and Graduate Student Assembly.

Hearing no further discussion, a motion was made and seconded to APPROVE Resolution 2018-19.D. This Resolution will be forwarded for review at University Council.

The motion passed unanimously.

Resolution 2018-19.F *Resolution to Approve Transitional Plan to Facilitate the Change to Date of Entry Graduation Requirements,* **Second Reading**

The motion was made and seconded to present for second reading Resolution 2018-19.F *Resolution to Approve Transitional Plan to Facilitate the Change to Date of Entry Graduation Requirements.*

M. Kasarda opened the floor for discussion on Resolution 2018-19.F.

Discussion and clarification topics included the following:

- Several Commission members stated that they had received supportive feedback for the Resolution from their respective departments.
- C. Boone stated that the Engineering department would like additional time to submit feedback on the Resolution and had voiced concerns over

transfer and returning students, as well as length of time courses would have to remain on the timetable

Resolution 2018-19.F has received a waiver from Faculty Senate, Staff Senate, Student Government Association, and Graduate Student Assembly.

Hearing no further discussion, a motion was made and seconded to APPROVE Resolution 2018-19.F. This Resolution will be forwarded for review at University Council.

The motion passed with a majority with one vote against.

For Information Purposes: Student Government Association Response to **Resolution 2018-19.E** *Resolution to Discontinue Degree, Bachelor of Science in Engineering Science and Mechanics*

M. Kasarda read the Student Government Association Response to Resolution **2018-19.E** for informational purposes.

<u>NEW BUSINESS</u>:

Resolution 2018-19.G *Resolution to Amend Implementation for the Pathways General Education Curriculum to Extend Pathways Ad Hoc Review Committee,* **First Reading**

The motion was made and seconded to present for first reading Resolution 2018-19.G *Resolution to Amend Implementation for the Pathways General Education Curriculum to Extend Pathways Ad Hoc Review Committee.*

M. Kasarda opened the floor for discussion on Resolution 2018-19.G.

Resolution 2018-19.G has been forwarded to Faculty Senate, Staff Senate, Student Government Association, and Graduate Student Assembly for comment. The second reading of Resolution 2018-19.G will take place at the next available CUSP meeting.

REPORTS AND MINUTES FROM COMMISSION COMMITTEES/SUB - COMMITTEES

COMMITTEE REPORTS

Academic Support Committee

No report.

Academic Policies Committee

R. Panneton presented the March 6, 2019 minutes of the Academic Policies Committee. A motion was made and seconded to accept the March 6, 2019 minutes of the Academic Policies Committee.

R. Panneton presented the March 27, 2019 minutes of the Academic Policies Committee. A motion was made and seconded to accept the March 27, 2019 minutes of the Academic Policies Committee.

Athletics Committee

No report.

Commencement Committee

No report.

Honor Council

L. Hoyns shared that delegate recruitment for the council received 260 applications which was cut down to 60 with individual interviews being conducted the week of April 8, 2019. The Council is planning to create a group beginning in the Fall 2019 semester to help with outreach activities.

Library Committee

No report.

Undergraduate Curriculum Committee

No report.

Pathways Ad Hoc Review Committee

L. Zietsman presented the report of the March 27, 2019 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the March 27, 2019 report of the Pathways Ad Hoc Review Committee.

The motion passed unanimously.

PATHWAYS AD-HOC REVIEW COMMITTEE REPORT—MARCH 27, 2019 For "First and Second Reading" Unanimous Approval

COURSES

New:

CLE Fall 2019/Pathways Fall 2019

College of Liberal Arts and Human Sciences

CRIM 4474: Cyber Criminology (CLE Area 3, Pathways Reasoning in the Social Sciences G03, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4725)

RUS 3434 (ENGL 3434): The Works of Vladimir Nabokov (CLE Area 2, Pathways Critical Thinking in the Humanities G02, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4811)

College of Science

ECON 1104: Economics of Gender (CLE Area 3, Pathways Reasoning in the Social Sciences G03, Critical Analysis of Equity and Identity in the United States G07, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4800)

PSYC 4194 (BDS 4194): Predicting Social Behavior (CLE Area 3, CLE Area 5, Pathways Advanced Quantitative and Computational Thinking G05a, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4795)

Pathways Fall 2019

University Honors College

UH 2855-2856: Calhoun Transdisciplinary Fusion Studio (Pathways Critique and Practice in Design and the Arts G06d, Ethical Reasoning G10) Pathways Fall 2019 (CM 4786)

Revised:

CLE Fall 2019/Pathways Fall 2019

College of Liberal Arts and Human Sciences

AFST 1814: Introduction to African Studies (CLE Area 2, CLE Area 7, Pathways Critical Thinking in the Humanities G02, Reasoning in the Social Sciences G03, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4806)

AHRM 1014: Design and Art for Consumers (CLE Area 6, Pathways Critique and Practice in Design and the Arts G06ad, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4819)

STS 2154: The Life Sciences and Society (CLE Area 2, Pathways Critical Thinking in the Humanities G02, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4818)

College of Science

BIOL 1064: Plants and Civilization (CLE Area 4, CLE Area 7, Pathways Reasoning in the Natural Sciences G04, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4830)

Pamplin College of Business

MGT 4334: Ethical Leadership and Corporate Social Responsibility (CLE Area 7, Pathways Advanced Discourse G01a, Critical Analysis of Equity and Identity in the United States G07, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4826)

Pathways Fall 2019

MINORS

New:

Effective Graduation Calendar Year 2021

College of Natural Resources and Environment

Establishment of new Pathways Minor: Blue Planet (BLPL); First term to declare minor: Spring 2019; First term and year to graduate: Winter 2021 (CM 4794)

Check sheet for new Pathways Minor: Blue Planet (BLPL); First term to declare minor: Spring 2019; Effective for students graduating calendar year 2021 (CM 4794)

CONSTITUENT REPORTS

Commission on Administrative and Professional Faculty Affairs

No report.

Staff Senate

No report.

Faculty Senate

No report.

Student Government Association

No report.

Graduate Student Assembly

No report.

OTHER BUSINESS:

For Information Purposes: CSA **Resolution 2018-19.B** *Resolution in Support of Accommodating Religious and Cultural Absences*

M. Kasarda read the CSA **Resolution 2018-19.B** *Resolution in Support of Accommodating Religious and Cultural Absences* for informational purposes.

M. Kasarda opened the floor for discussion on Resolution 2018-19.B.

Discussion and clarification topics included the following:

- Commission members questioned the legality of the Resolution per federal and state law regarding religion in public schools.
- D. Thorp noted the inaccuracies in the Resolution regarding the existence of a similar policy at the University of Virginia.
- R. Sparks provided the Commission with background on the history of the calendar of religious holidays and stated that there would continue to be collaboration with CSA to provide clarification on the Resolution.

Nominations/Review of CUSP Sub-Committee Chairs and Representatives For Academic Year 2019-2020

The following individuals accepted nominations to serve as Chairs and Representatives of CUSP Sub-Committees for Academic Year 2019-2020:

- Academic Support Committee Dan Thorp
- Academic Policies Committee Robin Panneton
- University Athletics Committee
 - Commission will revisit at the April 22 CUSP meeting
- University Commencement Committee
 - Commission will revisit at the April 22 CUSP meeting
- University Curriculum Committee for General Education Virginia Fowler

G. Costello presented a request to the Commission to consider review and electronic approval of the final reports of both the Undergraduate Curriculum Committee and Pathways Ad Hoc Review Committee for the last meetings of the Spring 2019 term occurring after the last scheduled Commission meeting.

A motion was made and seconded to review and approve electronically the final reports of both the Undergraduate Curriculum Committee and Pathways Ad Hoc Review Committee.

The motion passed unanimously.

ADJOURNMENT

A motion was made and seconded to adjourn the meeting at 3:35 PM.

Respectfully Submitted, Becki Smith, Office of the University Registrar

MINUTES COMMISSION ON UNDERGRADUATE STUDIES AND POLICIES APRIL 22, 2019 230 Student Services Building, 3:00 PM

PRESENT: R. Panneton for S. Morton (Acting Chair); K. Albright; V. Fowler; K. Goyne; S. Sumner for A. Grant; L. Hoyns for M. Andrews; T. Hammett; K. Hosig; L. Khansa; J. Loferski; J. Orr; C. Boone for J. Ross; J. Sible; S. Tatum; D. Thorp; L. Zietsman

ABSENT WITH NOTIFICATION: B. Barnhill; M. Byers; S. Campos; G. Daniel; K. Edgar; R. Holloway; C. Johnson; S. Johnson; M. Kasarda; A. Knoblauch; C. Leeth; S. Metko; K. Redican; P. Tarkenton; C. Touzel; D. Wodak

VISITORS: N. Akers; B. Armstrong; G. Costello; J. Espinoza; M. James; B. Smith

CALL TO ORDER

The meeting was called to order at 3:00 PM by R. Panneton.

ADOPTION OF THE AGENDA

A motion was made and seconded to approve the agenda. The motion to approve the agenda passed unanimously.

ANNOUNCEMENT OF APPROVAL AND POSTING OF MINUTES

R. Panneton announced the April 8, 2019 minutes were electronically approved and can be accessed via the University Registrar's website:

https://registrar.vt.edu/content/dam/registrar_vt_edu/documents/Updates/governance/2018-2019/apr8/cusp_minutes_4_8_19.pdf

OLD BUSINESS:

Resolution 2018-19.G *Resolution to Amend Implementation for the Pathways General Education Curriculum to Extend Pathways Ad Hoc Review Committee,* **Second Reading**

The motion was made and seconded to present for second reading Resolution 2018-19.G *Resolution to Amend Implementation for the Pathways General Education Curriculum to Extend Pathways Ad Hoc Review Committee.*

R. Panneton opened the floor for discussion on Resolution 2018-19.G.

Resolution 2018-19.G has received a waiver from Faculty Senate, Staff Senate, Student Government Association, and Graduate Student Assembly. Hearing no further discussion,

a motion was made and seconded to APPROVE Resolution 2018-19.G. This Resolution will be forwarded for review at University Council.

The motion passed unanimously.

REPORTS AND MINUTES FROM COMMISSION COMMITTEES/SUB - COMMITTEES

COMMITTEE REPORTS

Academic Support Committee

No report.

Academic Policies Committee

R. Panneton shared that the Committee will hold its last meeting on April 23, 2019 and will then begin drafting a policy regarding academic relief.

Athletics Committee

No report.

Commencement Committee

No report.

Honor Council

L. Hoyns shared that 7 delegates have been chosen for Honor Council after conclusion of the interview process. The Council is planning to create two groups beginning in the Fall 2019 semester. One group will assist with outreach activities and the second group will consist of a student panel that will assist with recruitment.

Library Committee

No report.

Undergraduate Curriculum Committee

On behalf of K. Redican, R. Panneton presented the April 12, 2019 report of the Undergraduate Curriculum Committee.

A motion was made and seconded to approve the April 12, 2019 report of the Undergraduate Curriculum Committee.

The motion passed unanimously.

UND	DERGRADUATE CURRICULUM COMMITTEE REPORT—APRIL 12, 2019	
For "First and Second Reading" Unanimous Approval		
COURSES		
New:		
Spring	2020	
	College of Engineering	
	MINE 2544 Leadership for Responsible Mining (CM-4802)	
Revised:		
Fall 20	019	
	College of Engineering	
	MINE 2504 Introduction to Mining Engineering (CM-4801)	
DEGREES, M	AJORS, OPTIONS, MINORS	
<u>Major</u> :		
Revised:		
Gradua	ating Calendar Year 2021	
	College of Architecture and Urban Studies	
	Major: Industrial Design (IDS) under Degree: Bachelor of Science in Industrial Design (BSIDS), effective for students graduating in calendar year 2021 (CM-5186)	

College of Liberal Arts and Human Sciences

Major: Religion and Culture (RLCL) under Degree: Bachelor of Arts in Religion and Culture (BARLC) (Revised), effective for students graduating in calendar year 2021 (CM-5002)

College of Natural Resources and Environment

Major: Environmental Informatics (EI) under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC) (Revised), effective for students graduating in calendar year 2021 (CM-5223)

Major: Environmental Resource Management (ERM) under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC) (Revised), effective for students graduating in calendar year 2021 (CM-5224)

College of Science

Major: Physics (PHYS) under Degree: Bachelor of Arts (BA) (Revised), effective for students graduating in calendar year 2021 (CM-5020)

Major: Physics (PHYS) under Degree: Bachelor of Science (BS) (Revised), effective for students graduating in calendar year 2021 (CM-5027)

Pamplin College of Business

Major: Real Estate (REAL) under Degree: Bachelor of Science in Real Estate (BSRST), effective for students graduating in calendar year 2021 (CM-5098)

<u>Major</u>:

Renamed:

Graduating Calendar Year 2021

College of Natural Resources and Environment

Establishment of major under new name Major: Environmental Conservation & Society (ECS) under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC) (New), effective for students graduating in calendar year 2021 (CM-5179)

With approval of new major name "Environmental Conservation & Society (ECS)", discontinue major name "Natural Resources Conservation (NRC)" under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC) (Discontinue), last term and year to graduate: Fall 2023 (CM-5179)

Major Concentration/Option:

New:

Graduating Calendar Year 2021

Pamplin College of Business

Establishment of new Major Concentration/Option: Cybersecurity Management and Analytics (CMA) under Bachelor of Science in Business (BSBUS), Major: Business Information Technology (BIT) (New), effective for students graduating in calendar year 2021, first term to enroll: Spring 2019, first term and year to graduate: Winter 2021 (CM-4762)

Revised:

Graduating Calendar Year 2021

College of Natural Resources and Environment

Major Concentration/Option: Urban Forestry (UFOR) under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC), Major: Forestry (FOR) (Revised), effective for students graduating in calendar year 2021 (CM-4856)

Major Concentration/Option: Forest Resource Management (FRB) under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC), Major: Forestry (FOR) (Revised), effective for students graduating in calendar year 2021 (CM-4977)

Major Concentration/Option: Forest Operations and Business (FOB) under Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC), Major: Forestry (FOR) (Revised), effective for students graduating in calendar year 2021 (CM-5225)

College of Science

Major Concentration/Option: Physics Education (PHYE) under Degree: Bachelor of Arts (BA), Major: Physics (PHYS) (Revised), effective for students graduating in calendar year 2021 (CM-5021)

	Major Concentration/Option: Pre-Health (PREH) under Degree: Bachelor of
	Arts (BA), Major: Physics (PHYS) (Revised), effective for students graduating in calendar year 2021 (CM-5022)
	Major Concentration/Option: Pre-Law (PRLW) under Degree: Bachelor of Arts (BA), Major: Physics (PHYS) (Revised), effective for students graduating in calendar year 2021 (CM-5024)
Disco	ntinue:
	Graduating Calendar Year 2023
	College of Natural Resources and Environment
	With approval of Major: Environmental Conservation & Society (ECS)", discontinue the following major concentrations/options under the current Degree: Bachelor of Science in Forest Resources and Environmental Conservation (BSFRC), Major: Natural Resources Conservation (NRC) (CM-5179):
	Discontinue Major Concentration/Option: Conservation and Recreation Management (CRM) (Discontinue), last term to enroll: Spring 2019; last term and year to graduate: Fall 2023 (CM-5179)
	Discontinue Major Concentration/Option: Environmental Education (NREE) (Discontinue), last term to enroll: Spring 2019; last term and year to graduate: Fall 2023 (CM-5179)
Mino	<u>.</u>
New:	
	Effective Graduating Calendar Year 2019
	College of Liberal Arts and Human Sciences
	Establishment of New Minor: Leadership and Service (LAS) (New) effective for students graduating in calendar year 2019, first term to enroll: Fall 2019, first term and year to graduate: Fall 2019 (CM-5129)

University Curriculum Committee for General Education

L. Zietsman presented the minutes of the April 3, 2019 University Curriculum Committee for General Education. A motion was made and seconded to accept the minutes of the April 3, 2019 University Curriculum Committee for General Education.

The motion passed unanimously.

Pathways Ad Hoc Review Committee

L. Zietsman presented the report of the April 10, 2019 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the April 10, 2019 report of the Pathways Ad Hoc Review Committee.

The motion passed unanimously.

PATHWAYS AD-HOC REVIEW COMMITTEE REPORT—APRIL 10, 2019

For "First and Second Reading" Unanimous Approval

COURSES

New:

CLE Summer 2019/Pathways Summer 2019

College of Architecture and Urban Studies

ITDS 3114: Sustainable Design and Biophilia (New) (CLE Area 6, Pathways Critique and Practice in Design and the Arts G06d, Ethical Reasoning G10) CLE Summer II 2019/Pathways Summer II 2019 (CM 4886) **Note:** With the approval of ITDS 3114: Sustainable Design and Biophilia, ITDS 4114: Sustainable Design and LEED will be discontinued.

College of Liberal Art and Human Sciences

EDCI 2614: The Reading Mind: Learning to Read (New) (CLE Area 3, Pathways Reasoning in the Social Sciences G03, Intercultural and Global Awareness G11) CLE Summer I 2019/Pathways Summer I 2019 (CM 5136)

CLE Fall 2019/Pathways Fall 2019

College of Agriculture and Life Sciences

ENT 2804: Bees: Biology, Diversity, and Sustainability (New) (CLE Area 4, Pathways Reasoning in the Natural Sciences G04, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4946)

College of Liberal Arts and Human Sciences

COMM 2094: Communication and Issues of Diversity (New) (CLE Area 7, Pathways Critical Analysis of Equity and Identity in the United States G07, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4863)

Note: With the approval of COMM 2094: Communications and Issues of Diversity, COMM 4314: Communications and Issues of Diversity will be discontinued.

DANC 2004: Anatomy for Performers (New) (CLE Area 2, CLE Area 6, Pathways Critique and Practice in Design and the Arts G06a, Critical Analysis of Identity and Equity in the United States G07, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 5243)

DANC 2024: Introduction to Dance Techniques (New) (CLE Area 2, CLE Area 6, Pathways Critique and Practice in Design and the Arts G06a, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 5245)

HIST 2484: Modern Germany (New) (CLE Area 3, CLE Area 7, Pathways Reasoning in the Social Sciences G03, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4858)

PHIL 3334: Ethical Perspectives on Artificial Intelligence (New) (CLE Area 2, Pathways Critical Thinking in the Humanities G02, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4833)

SPAN 3564: Community through Service: Latino NRV (New) (CLE Area 2, Pathways Critical Thinking in the Humanities G02, Critical Analysis of Identity and Equity in the United States G07, Intercultural and Global Awareness G11) CLE Fall 2019/Pathways Fall 2019 (CM 4857)

Pathways Fall 2019

College of Engineering

ME 3024: Engineering Design and Economics (New) ME 3034: Mechanical Engineering Discourse (New) ME 4015-16: Engineering Design and Project (Revised) (ME 3024, ME 3034, and ME 4015-4016 contribute toward Pathways Advanced Discourse G01a, Ethical Reasoning G10) Pathways Fall 2019 (CM 4855)

Note: With the approval of ME 3024: Engineering Design and Economics, ME 2024: Introduction to Engineering Economics will be discontinued.

College of Science

BIOL 1074: How Animals Think (New) (Pathways Reasoning in the Natural Sciences G04, Ethical Reasoning G10) Pathways Fall 2019 (CM 4971)

Revised:

CLE Summer 2019/Pathways Summer 2019

College of Liberal Arts and Human Sciences

HIST 2104: Topics and Critical Issues in US History (Revised) (CLE Area 2, CLE Area 3, Pathways Critical Thinking in the Humanities G02, Critical Analysis of Identity and Equity in the United States G07, Intercultural and Global Awareness G11) CLE Summer I 2019/Pathways Summer I 2019 (CM 4862)

CLE Fall 2019/Pathways Fall 2019

College of Liberal Arts and Human Sciences

CINE 4144: Topics in Cinema Studies (Revised) (CLE Area 2, CLE Area 3, Pathways Critical Analysis of Identity and Equity in the United States G07, Ethical Reasoning G10) CLE Fall 2019/Pathways Fall 2019 (CM 4865)

CLE Spring 2020/Pathways Spring 2020

College of Natural Resources and Environment

FREC 2124: Forests, Society, & Climate (Revised) (CLE Area 7, Pathways Reasoning in the Social Sciences G03, Reasoning in the Natural Sciences G04, Intercultural and Global Awareness G11) CLE Spring 2020/Pathways Spring 2020 (CM 4961)

CONSTITUENT REPORTS

Commission on Administrative and Professional Faculty Affairs

No report.

Staff Senate

No report.

Faculty Senate

No report.

Student Government Association

No report.

Graduate Student Assembly

No report.

OTHER BUSINESS:

Undergraduate Admissions Annual Report

J. Espinoza presented the annual report for the Office of Undergraduate Admissions which included updates on changes to the admissions process, as well as an annual report on the Undergraduate Admissions Appeals Committee. For more information, contact <u>admissions@vt.edu</u>.

Scholarships and Financial Aid Report

B. Armstrong provided an update related to legislature changes that impact Financial Aid. For more information, contact <u>finaid@vt.edu</u>.

Nominations/Review of CUSP Sub-Committee Chairs and Representatives For Academic Year 2019-2020

The following individuals accepted nominations to serve as Chairs and Representatives of CUSP Sub-Committees for Academic Year 2019-2020:

- University Athletics Committee Susan Sumner
- University Commencement Committee Lara Khansa

ADJOURNMENT

A motion was made and seconded to adjourn the meeting at 3:53 PM.

Respectfully Submitted, Becki Smith, Office of the University Registrar