1. **Adoption of Agenda**

   Dr. Timothy Sands

2. **Announcement of approval and posting of minutes of December 4, 2017**

   Dr. Timothy Sands

   These minutes have been voted on electronically and will be posted on the University web.

3. **Reports from Commission Chairs**

   Dr. Timothy Sands

   - 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 Research
     - Commission on Staff Policies and Affairs
     - Commission on Student Affairs
     - Commission on Undergraduate Studies and Policies
     - Commission on University Support

   Ms. Janice Austin
   Dr. Deyu Hu
   Dr. John Ferris
   Dr. Kevin Edgar
   Dr. Jan Helge Bøhn
   Ms. Tammie Smith
   Mr. Chris Saunders
   Dr. Dean Stauffer
   Dr. Richard Ashley

4. **Old Business**

   Dr. Timothy Sands

   **University Council**
   
   **Resolution UC 2017-18A**
   
   Resolution to Amend the University Council By-Laws as Recommended by the Governance Task Force (Includes Governance Task Force report as requested by CSA Resolution 2015-16B & CFA Resolution 2015-16D.)

   Mr. Robert Sebek

5. **New Business**

   Dr. Timothy Sands

   **Commission on Staff Policies and Affairs**
   
   **Resolution CSPA 2017-18B**
   
   Resolution to Change Authority to Manage the Staff Career Achievement Award

   Ms. Tammie Smith

   **Commission on Undergraduate Studies and Policies**
   
   **Resolution UC 2017-18D**
   
   Resolution to Approve New Degree, Bachelor of Arts in Science, Technology, and Society

   Dr. Dean Stauffer

   **Commission on Undergraduate Studies and Policies**
   
   **Resolution UC 2017-18E**
   
   Resolution to Approve New Degree, Bachelor of Science in Science, Technology, and Society

   Dr. Dean Stauffer

6. **Announcement of acceptance and posting of Commission Minutes and Governance Task Force Report**

   Dr. Timothy Sands

   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

   **November 8, 2017**
Commission on Faculty Affairs  
November 17, 2017

Commission on Graduate Studies and Policies  
November 15, 2017  
December 6, 2017

Commission on Outreach and International Affairs  
November 16, 2017  
December 14, 2017

Commission on Research  
November 8, 2017

Commission on Undergraduate Studies and Policies  
November 6, 2017  
November 27, 2017  
December 11, 2017


6. **Presentation**  
   Information Technology Initiatives  
   Dr. Scott Midkiff

7. **For Information Only**  
   Minutes of the University Advisory Council on Strategic Budgeting and Planning  
   November 16, 2017  
   Dr. Timothy Sands

8. **Adjournment**  
   Dr. Timothy Sands

Absent: Karen DePauw, Michael Friedlander, Guru Ghosh, Steve McKnight, Bryan Brown, Anita Puckett, Chris Lawrence, Mary Marchant (with notice), Judy Alford (with notice), Brian Huddleston, Katrina Loan, Teresa Lyons (with notice), Annette Bailey, Jeannie Layton-Dudding, John Massey (with notice), Christine Tyso, Michele Waters, Prateek Mishra, Avalon Roche, & Peter Shaw

Guests: Tom Brown, Matt Chan, D’Elia Chandler, Sam Easterling, Jack Finney, Chris Flynn, Rachel Gabriele, Rachel Holloway, Rick Sparks, & Chris Wise

Dr. 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 of approval and posting of minutes of November 13, 2017

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).

3. Old Business

Commission on Undergraduate Studies and Policies
Resolution CUSP 2017-18B
Resolution to Approve New Major: Philosophy, Politics, and Economics (PPE), in Bachelor of Arts in Philosophy.

Dr. Dean Stauffer presented this resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

4. New Business

University Council
Resolution UC 2017-18A
Resolution to Amend the University Council By-Laws as Recommended by the Governance Task Force
Ms. Sue Teel presented this resolution for first reading. Ms. Teel informed the council members that this resolution is the result of a Governance Task Force that was established to collect data on the impacts of the CFA 2015-16B Resolution on Shared Governance, which required four commissions to refer their resolutions to the Faculty Senate for review. The Task Force determined that there were no significant delays in the process when resolutions were sent to Faculty Senate for review. This resolution will amend the University Council By-Laws further as recommended by the Governance Task Force to require all commissions to send their resolutions to the Faculty Senate, the Staff Senate, the Graduate Student Assembly, and the Student Government Association for review prior to being brought to University Council for first reading. Dr. John Ferris informed the council that both the Faculty Senate and the Commission on Faculty Affairs unanimously approved this resolution.

5. Announcement of Approval and Posting of Commission Minutes

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 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 Equal Opportunity and Diversity
  May 1, 2017
  October 9, 2017

- Commission on Faculty Affairs
  November 3, 2017

- Commission on Graduate Studies and Policies
  November 1, 2017

- Commission on Outreach and International Affairs
  October 19, 2017

- Commission on Staff Policies and Affairs
  September 26, 2017

- Commission on Undergraduate Studies and Policies
  October 23, 2017

6. Presentation

Dr. Tom Brown and Dr. Chris Flynn gave a presentation on how Virginia Tech cares for students in crisis situations and prepares for potential student crises situations. (attached).

7. Announcement

Mr. Seyi Olusina announced that the applications for the undergraduate and graduate representatives to the Board of Visitors for 2018-19 are currently being accepted. All applicants have to attend an information session or meet with the current representatives as part of the process this year. Undergraduate applicants can be rising juniors or seniors.

7. Other Item

A question was raised regarding the ramifications of the Tax Reform Bill being proposed. Dr. Sands indicated that he will have someone from the Virginia Tech Government Relations office give an update at one of the first University Council meetings of the spring semester.
8. **Adjournment**

There being no further business, a motion was made to adjourn the meeting at 3:54 p.m.
OFFICE OF THE DEAN OF STUDENTS

Our Mission
To serve as advocates for students and their support networks in times of personal, academic, and community crisis.

Our Work
We know that life doesn't stop while students are in college. When life throws challenges in students' way, we're here to help them create plans, connect to resources, and gain the confidence to get back on track. We work with students, families, friends, and faculty. We're a friendly, caring team ready to listen and assist. We welcome referrals, appointments, and walk-ins.

Our Team
Tom Brown, dean of students
Tara Frank, assistant dean of students
Bruce Hayden, assistant dean of students
Anthony Scott, associate dean of students
Tonya Windsor, administrative manager
Kelley Woods-Johnson, assistant dean of students

General Support & Advising
After Hours on-call & Crisis Response
Conduct & Title IX Advising
Absence Verification
Financial Resources
Bias-Incident Reporting
Hospital Visits
Veterans @ VT
VT Interfaith Council

109 East Eggleston Hall
540-231-3787
dean.students@vt.edu
www.dos.vt.edu
Office Hours:
Monday-Friday
8:00am-5:00pm
Introduction
In your daily work you may occasionally meet a student in some level of distress. If you find yourself interacting with a student in distress, the information contained in this folder may be sufficient to help you address the situation. However, if the information does not address your student’s particular situation or the situation is beyond your scope of ability or comfort, the Dean of Students staff is one of your best resources. The Office of the Dean of Students, a department within the Division of Student Affairs, is designated to respond and help students manage during stressful situations.

The Dean of Students staff works closely with various campus departments and the Virginia Tech and Blacksburg Police Departments to foster a safe, educational environment within the Virginia Tech and Blacksburg communities and beyond. They are able to advise and partner with you to formulate a more comprehensive response to students for whom you have shared concerns.

Care Team
The Care Team meets weekly to review ongoing student cases. It is convened by the Dean of Students staff and is comprised of representatives from across the Division of Student Affairs and campus. The team focuses on routine matters of crises, regarding individual students, including but not limited to, disturbing behavior, or medical situations. The group provides referrals for the student and works with the student until the issue is resolved or the student has received adequate support services from the university.

The Care Team may also refer student cases to the Threat Assessment Team (TAT).

Threat Assessment Team (TAT)
TAT meets weekly to determine if an individual of concern poses, or may reasonably pose, a threat of violence to self or others and to intervene to avert the threat and maintain the safety of the situation. The team responds to behaviors exhibited by students, employees, visitors, and non-VT affiliated persons prior to a critical incident in an attempt to prevent violence so that our campus remains a safe and secure working and learning environment.

TAT is convened by the Virginia Tech Police Department and is comprised of representatives from across campus.

Bias-related Incidents
Bias incidents are expressions against a person or group because of the person’s or group’s age, color, disability, gender, gender identity, gender expression, genetic information, national origin, political affiliation, race, religion, sexual orientation, veteran status, or any other basis protected by law. It is always important not to label an incident too quickly.

For more information and/or to report a bias related incident, go to dos.vt.edu/express_a_concern.html.

Contact us
Phone
540-231-3787

Email
dean.students@vt.edu

Walk-in
109 East Eggleston Hall

Hours
8:00 am – 5:00 pm, M-F

A member of the Dean of Students staff serves on call after business hours and weekends 365 days a year. You can reach the on-call administrator after hours and on weekends by calling VT Police Security Center at: 540-231-6411, press 1.
Signs of a student in distress
As someone who interacts with students on a regular basis, you can play an important role in early identification of a student in distress. Below are some behaviors that may indicate an individual is in need of assistance:

- Significant academic changes. Going from consistently passing grades to frequent poor performance. Excessive absences or tardiness.
- Frequent requests for exceptions to policies and deadlines.
- Increased dependence on you. Student schedules numerous appointments, often remains after class to speak with you.
- Unusual patterns of interaction with others. Showing aggressiveness, dominating conversations or displaying anxiety caused by having to interact with others.
- Unusual or exaggerated emotional responses that are inappropriate to the situation.

Working with a student in distress
If you encounter a student who displays one or more of the above behaviors, that individual is likely in some kind of distress. You may wish to hold a conversation with the student to determine the best approach to help. It may be something minor that can easily be managed or it may be a more significant issue in that you will want to seek the help from other campus resources. In speaking with the student:

Do
- speak privately
- inform a colleague of the meeting and ask for assistance if necessary
- let the student know you are concerned for their welfare
- express your concern in nonjudgmental terms
- seek a time-out if the behavior escalates
- listen carefully
- make a referral to the appropriate university department
- maintain clear physical boundaries
- recognize your limits
- document the interaction or incident
- trust your instincts and end the meeting if you feel it is not going in an appropriate direction

Do not
- promise confidentiality
- judge or criticize
- ignore unusual behavior
- personalize the problem
- involve yourself beyond the limits of your time and/or skill
- physically touch the student or try to force them to leave your office

Absence verifications
As a faculty or staff member, the decision to allow a student to make-up missed classes, assignments, exams, employment, or other activities, belongs solely to you. However, if you prefer that an absence verification is made on a more formal basis, the Dean of Students staff can ask a student to provide documentation of circumstances that prohibited class attendance or completion of assignments. With proper documentation, the Dean of Students staff will provide absence verification for life events that are beyond the scope of a student's control.

Examples include, but are not limited to:
- Illness or death of a family member or friend
- Off-campus medical appointments or hospital admission*
- Court subpoenas
- Military orders

The Dean of Students staff will not provide absence verifications for the following reasons:
- Faith-based practices or celebrations (refer to the following link for a list of religious and ethnic holidays: www.registrar.vt.edu/dates_deadlines/religious_ethnic)
- Family celebrations
- Planned events such as vacations or trips abroad
- Internships, interviews, student organization or academic trips

For absences due to these circumstances you are encouraged to discuss the reason for absence with the student and use your discretion when deciding whether or not to allow make-up work.

The Dean of Students staff provides absence verification only. They do not "excuse" or "approve" absences. Faculty have the final decision on the completion of any missed assignments, tests, or other academic commitments.

*When a student visits Schiffert Health Center, an appointment note card which verifies a one-time visit is provided. For more serious illnesses, a 3 or 5-day note may be provided. Faculty and staff members are encouraged to accept these notes as verification for the absence. It is not necessary for the student to seek further absence verification from the Office of the Dean of Students.
Responding to students in distress
for faculty, staff, teaching assistants, advisors, etc.

Aggressive or Disruptive behavior

An encounter with a student that leaves you uneasy or in fear for your safety should be taken seriously. If a student is agitated and/or aggressive, contact VTPD. If you believe the student is a threat to self or others, contact VTPD immediately. VTPD will assist you in assessing the level of threat, determining the appropriate next step, and dispatching additional law enforcement if necessary.

Illness

If you are concerned about a student's physical health, make a referral to Schiffert Health Center. Schiffert staff educates students regarding self-care and wellness and assists members of the University community in managing health-related crises.

Emotional behavior

If a student experiences emotional distress, struggles with a personal or academic issue, experiences a change in behavior such as withdrawal or depression, or significantly changes physical appearance, you may make a referral to Cook Counseling Center (CCC). Their services are free to enrolled students and students can be seen by appointment or same-day crisis consultation. If you think it is more effective, the student may call for an appointment from your office. If you believe the situation is urgent, you can call in the student's presence and state that the student needs to be seen immediately. If you are concerned about a student but unsure about the appropriateness of a counseling referral, contact the CCC staff for a consultation.

Disability

If you are aware of a student with a disability who has difficulties or you have questions about accommodations, contact Services for Students with Disabilities (SSD). Remember not all disabilities are visible; if you are asked by the student to contact the SSD, please do so without questioning the student. The SSD staff will assist you in determining any accommodations that may be required for the student.

Sexual misconduct

As an employee of VT you are required to report possible instances of sexual harassment or sexual misconduct toward any other member of the VT community. Sexual harassment or misconduct cases against students should be reported to the Deputy Title IX Coordinator. Sexual harassment or misconduct cases against non-student employees should be reported to the Human Resources Equity and Access staff. Both the VT Women's Center and the Women's Resource Center of the New River Valley offer support to students, faculty and staff who may have experienced sexual harassment or misconduct.

Office of the Dean of Students

Assisting Students
## Important contact information

### Campus resources

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>911</td>
<td>n/a</td>
</tr>
<tr>
<td>Cook Counseling Center</td>
<td>231-6557</td>
<td>ucc.vt.edu</td>
</tr>
<tr>
<td>Dean of Students Office</td>
<td>231-3787</td>
<td>dos.vt.edu</td>
</tr>
<tr>
<td>Graduate School Ombuds</td>
<td>231-9573</td>
<td>graduate.ombudsman.vt.edu</td>
</tr>
<tr>
<td>Housing and Residence Life</td>
<td>231-6205</td>
<td>housing.vt.edu</td>
</tr>
<tr>
<td>Schiffert Health Center</td>
<td>231-6444</td>
<td>healthcenter.vt.edu</td>
</tr>
<tr>
<td>Services for Students with Disabilities</td>
<td>231-3788</td>
<td>ssd.vt.edu</td>
</tr>
<tr>
<td>Student Conduct</td>
<td>231-3790</td>
<td>studentconduct.vt.edu</td>
</tr>
<tr>
<td>Student Legal Services</td>
<td>231-4720</td>
<td>legal.sga.vt.edu</td>
</tr>
<tr>
<td>Threat Assessment Team</td>
<td>231-7194</td>
<td>threatassessment.vt.edu</td>
</tr>
<tr>
<td>Title IX Deputy Coordinator</td>
<td>231-2010</td>
<td>hrvt.edu/oea/title_IX</td>
</tr>
<tr>
<td>VT Police Security Center</td>
<td>540-231-6411</td>
<td>police.vt.edu</td>
</tr>
<tr>
<td>Women's Center</td>
<td>231-7806</td>
<td>womenscenter.vt.edu</td>
</tr>
</tbody>
</table>

### Dean of Students Reporting System

Faculty and staff members are encouraged to share concern for a student with the Office of the Dean of Students, enabling a more complete profile of the student in distress. This system is in place as one more available tool to report a concern. Phone calls to the Dean of Students Office are still welcomed and encouraged. **This is not a system to use for emergencies.**

#### Access for faculty

The "Dean of Students Reporting System" is available within the Hokie SPA/Faculty Access menu. Faculty members have the ability to report a concern for any student assigned to them, either enrolled in a course or as an advisee.

#### Access for staff

Deans, department heads, and directors are encouraged to identify critical staff members who they wish to have access to Office of the Dean of Students reporting system. Deans, department heads, and directors will need to send an email to deanstudents@vt.edu with the name of the critical staff member they wish to have registered for the reporting system.

### Additional resources

Links to additional resources can be found on the Dean of Students website, [dos.vt.edu](http://dos.vt.edu).

General student advocacy training is available for university faculty and staff, departments, and groups/organizations. Tailored training is provided, on request, by the staff members in the Office of the Dean of Students.

Specific student advocacy training is held twice a semester with varied topics. If you want to be notified of these routine training sessions, send your requests to dean.students@vt.edu.
Students in Crisis
Thomas E. Cook Counseling Center

Student Demand in the Past Decade

<table>
<thead>
<tr>
<th></th>
<th>2007-2008</th>
<th>2016-2017</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clients</td>
<td>645</td>
<td>3875</td>
<td>401%</td>
</tr>
<tr>
<td>Appointments</td>
<td>4134</td>
<td>23049</td>
<td>504%</td>
</tr>
</tbody>
</table>
Students in Crisis

Self-reported/Therapist Evaluated as Crisis
- Appointments 6%
- Clients 5%

Status Functioning at Appointment - Therapist Evaluated
0 Non-Crisis 96% (15,554)
1 Possible Suicidal Ideation 3% (506)
2 Hospitalization/Follow-Up 1% (106)

Hospitalizations 2016-2017

Temporary Detention Order/Emergency Custody Order
- 66

Presenting Concerns
1. Suicidal Ideation 33
2. Self-Harm 16
3. Unable to Care/Psychosis 14
4. Threat to Others 2
Hearing Results

- Released at Hearing 30
- Voluntary Hospitalization 13
- Involuntary Hospitalization 18

Role of the Case Manager/Coordinator of Emergency Services

1. Crisis Consultation
2. Assist with Hospitalization (ACCESS Evaluation/Direct Admit to NH)
3. Attend Hearing/Parental Notification
4. Obtain Consent to Share Information with CARE Team/Threat Assessment
5. Coordinate Discharge with Student/Hospital/Family
6. Treatment Plan (Note to Dean/Leave of Absence/Academic Relief)
7. Counseling/Psychiatric Follow-up
8. Supervise Staff
WHEREAS, Commission on Faculty Affairs Resolution 2015-16B was passed by University Council and approved by the President on February 1, 2016, providing a formal mechanism of consultation with the Faculty Senate during policy formulation by four commissions: The Commission on Faculty Affairs, Commission on Research, Commission on Undergraduate Studies and Policies, and Commission on Graduate Studies and Policies; and

WHEREAS, on the same date, a joint resolution by the Commission on Student Affairs (CSA 2015-16B) and the Commission on Faculty Affairs (CFA 2015-16D) calling for the creation of a Governance Task Force was passed by University Council and approved by the President; and

WHEREAS, the charge of the Governance Task Force included collecting data on the impacts of CFA Resolution 2015-16B and based on an analysis of that data presenting recommendations for changes to the system of shared governance intended to enhance the consultative role of the constituent groups; and

WHEREAS, the Governance Task Force concluded that CFA 2015-16B achieved its intent of increasing the consultative role of Faculty Senate without causing any delays in the approval process for resolutions; and

WHEREAS, the Governance Task Force subsequently concluded that the other three constituent groups (staff, undergraduate students, and graduate students) would each benefit from having a parallel consultative process;

NOW, THEREFORE, BE IT RESOLVED that Article II, Section 2 of the bylaws of Virginia Tech’s University Council be amended as follows:

WITH CHANGES NOTED IN RED:

2. In preparing the case for a new policy or program, each Commission shall keep constituencies (and also, as appropriate, other Commissions, the Faculty Senate,
the Staff Senate, the Graduate Student Assembly, and the Student Government Association) sufficiently well informed that relevant advice and counsel from outside the Commission proper can be brought to bear at the policy (program) formulation stage.

A. For all Commissions, it is the responsibility of individual Commission members, mainly by means of their cross-representational affiliations, to keep affiliated governance bodies and constituencies informed and to afford the opportunity for consultative referral.

B. Those Commissions that deal with issues for which the faculty have primary responsibility, that is, the Commission on Faculty Affairs, the Commission on Research, the Commission on Undergraduate Studies and Policies, and the Commission on Graduate Studies and Policies, shall consult with the Faculty Senate. All Commissions shall consult with the four formal constituent groups at the beginning of and during the process of developing resolutions. The four groups are identified as: Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association.

C. Upon first reading at the Commission, resolutions shall be referred by the Commission to the Faculty Senate, the four constituent groups (Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association) for the purpose of issuing to provide each group the opportunity to issue a formal recommendation, unless the Faculty Senate waives its right to do so (see subsection E. below). The Faculty Senate shall send its recommendation to the Commission upon the conclusion of its next regularly scheduled meeting, but in all cases within four weeks (counted while the University is in session). (Failure of a constituent group to forward its recommendation to the Commission within four weeks will not delay a resolution from progressing to University Council.) Any additional changes made to the resolution before its adoption by the Commission will be communicated to the Faculty Senate for their consideration. The Senate in formulating each group’s final recommendation to University Council. In addition, the Commission may request additional input from any of the groups before the final version of the resolution is completed.

D. The Commission will send the its final version of the resolution to the Faculty Senate constituent groups upon the Commission’s approval. The Faculty Senate groups will send their final recommendation(s) to University Council for consideration by Council. To be considered by University Council, any recommendations must be sent by the respective constituent group to the Secretary of University Council prior to the date of first reading at University Council. The Senate’s recommendation(s) of the group(s) will become a permanent appendix to the resolution not subject to revision or amendment by the Commission or by University Council.
E. Waivers of the Referral process in subsection C. above may be conditional or unconditional and may be issued at any time during the discussion of the resolution by the Commission. Waivers become operative when submitted to the Commission chair by a Faculty Senate officer designated representative(s) of the respective constituent group.

WITH CHANGES INCORPORATED:

2. In preparing the case for a new policy or program, each Commission shall keep constituencies (and also, as appropriate, other Commissions, the Faculty Senate, the Staff Senate, the Graduate Student Assembly, and the Student Government Association) sufficiently well informed that relevant advice and counsel from outside the Commission proper can be brought to bear at the policy (program) formulation stage.

A. For all Commissions, it is the responsibility of individual Commission members, mainly by means of their cross-representational affiliations, to keep affiliated governance bodies and constituencies informed and to afford the opportunity for consultative referral.

B. All Commissions shall consult with the four formal constituent groups at the beginning of and during the process of developing resolutions. The four groups are identified as: Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association.

C. Upon first reading at the Commission, resolutions shall be referred by the Commission to the four constituent groups (Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association) to provide each group the opportunity to issue a formal recommendation, unless the respective constituent group waives its right to do so (see subsection E. below). Each respective constituent group shall send its recommendation to the Commission upon the conclusion of its next regularly scheduled meeting, but in all cases within four weeks (counted while the University is in session). (Failure of a constituent group to forward its recommendation to the Commission within four weeks will not delay a resolution from progressing to University Council.) Any additional changes made to the resolution before its adoption by the Commission will be communicated to the four constituent groups for their consideration in formulating each group’s final recommendation to University Council. In addition, the Commission may request additional input from any of the groups before the final version of the resolution is completed.

D. The Commission will send its final version of the resolution to the constituent groups upon the Commission’s approval. The groups will send their final recommendation(s) to University Council for consideration by Council. To be considered by University Council, any recommendations must be sent by the
respective constituent group to the Secretary of University Council prior to the date of first reading at University Council. The recommendation(s) of the group(s) will become a permanent appendix to the resolution not subject to revision or amendment by the Commission or by University Council.

E. Waivers of the Referral process in subsection C. above may be conditional or unconditional and may be issued at any time during the discussion of the resolution by the Commission. Waivers become operative when submitted to the Commission chair by an officer of the respective constituent group.

####
Governance Task Force Final Report

Date: November 3, 2017

To: University Council

From: Governance Task Force

Subject: Final Report

Task Force Charge:

- To collect data on the impacts of the CFA 2015-16B Resolution on Shared Governance, the key provision of which requires the following commissions to refer their resolutions to the Faculty Senate: The Commission on Faculty Affairs, The Commission on Research, the Commission on Undergraduate Studies and Policies, and the Commission on Graduate Studies and Policies. The Faculty Senate, at its discretion, may issue a formal recommendation regarding the resolution that would accompany the resolution when it is presented to University Council for consideration. (Resolution passed 2/1/16).

- To recommend based on data analyzed any changes to the system of shared governance intended to enhance the consultative role of the constituent groups.

- To analyze the consultative role of the respective constituent groups.

List of the Task Force Members:

Dr. Sam Easterling (chair)
Kim O’Rourke (Secretary of University Council)
Rami Dalloul (Faculty Senate)
Sue Teel (Staff Senate)
Matthew Chan (GSA)
Alexa Parsley (SGA)
Ellen Plummer (Provost Office)
Gary Long (CUSP)
Joe Merola (CFA)
Andrew Neilson (COR)
Scott Salom (CGSP)

Overview of Task Force Work Plan: The Governance Task Force met seven times (September 21, 2016, October 19, 2016, December 13, 2016, February 8, 2017, February 23, 2017, April 12, 2017, & November 3, 2017) to discuss and make recommendations on the improvement of the current shared governance structure at Virginia Tech. The Task Force also discussed areas of shared governance that present challenges (specifically for the Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association).
**Task Force Outcomes:**

1. The Task Force determined that there were no negative impacts associated with CFA 2015-16B Resolution on Shared Governance. The requirement for resolutions from specific commissions to be sent to Faculty Senate for review and comment did not delay the progress of a resolution through the governance system. As a result, the Task Force recommends expansion of this process to include review by all four constituents groups of resolutions emanating from all commissions. (Refer to outcome No. 2.)

2. UC Resolution 2017-18A – Resolution to Amend the University Council By-Laws as Recommended by the Governance Task Force (attached) has been approved by the Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association and will be presented to University Council for first reading on December 4, 2017. This resolution will be sent to all commissions prior to the December 4 University Council meeting as a courtesy.

3. A calendar has been added to the publicly accessible governance website ([www.governance.vt.edu](http://www.governance.vt.edu)) where committees, commissions, and councils can add meeting times and locations.

4. Suggestions were made for a central office or person to work with commissions on governance training. The new Office of the Vice President for Policy and Governance will assume this responsibility.

5. The Office of the Vice President for Policy and Governance is implementing formal Governance 101 training session. Requests for training can be sent to abmyers@vt.edu.

**Other Findings:**

1. There is a need to develop a more effective transition process of leadership of commissions, SGA, and GSA to ensure transfer of knowledge and best practices.

2. The Governance Task Force discussed a potential change the University Council Constitution to require approval by the GSA and SGA (along with Faculty and Staff Senates) before any proposed change to the constitution goes to University Council. The Task Force determined that this matter was beyond the scope of its charge.

This report concludes the work of the Governance Task Force

Submitted by:
Dr. Sam Easterling
Chair of the Task Force
Resolution GSA2017-18A

Approved, GSA Executive Board
Approved, GSA General Assembly
Approved, Staff Senate
Approved, Faculty Senate
Approved, Student Government Association
First Reading, University Council
Approved, University Council
Approval, University President
Effective,

RESOLUTION TO AMEND THE UNIVERSITY COUNCIL BY-LAWS AS RECOMMENDED BY THE GOVERNANCE TASK FORCE: ESTABLISHING A GOVERNANCE REFERRAL SYSTEM

WHEREAS, Commission on Faculty Affairs Resolution 2015-16B was passed by University Council and approved by the President on February 1, 2016, providing a formal mechanism of consultation with the Faculty Senate during policy formulation by four commissions: The Commission on Faculty Affairs, Commission on Research, Commission on Undergraduate Studies and Policies, and Commission on Graduate Studies and Policies; and

WHEREAS, on the same date, a joint resolution by the Commission on Student Affairs (CSA 2015-16B) and the Commission on Faculty Affairs (CFA 2015-16D) calling for the creation of a Governance Task Force was passed by University Council and approved by the President; and

WHEREAS, the charge of the Governance Task Force included collecting data on the impacts of CFA Resolution 2015-16B and based on an analysis of that data presenting recommendations for changes to the system of shared governance intended to enhance the consultative role of the constituent groups; and

WHEREAS, the Governance Task Force concluded that CFA 2015-16B achieved its intent of increasing the consultative role of Faculty Senate without causing any delays in the approval process for resolutions; and

WHEREAS, the Governance Task Force subsequently concluded that the other three constituent groups (staff, undergraduate students, and graduate students) would each benefit from having a parallel consultative process;

NOW, THEREFORE, BE IT RESOLVED that Article II, Section 2 of the bylaws of Virginia Tech’s University Council be amended as follows:

WITH CHANGES NOTED IN RED:

2. In preparing the case for a new policy or program, each Commission shall keep constituencies (and also, as appropriate, other Commissions, the Faculty Senate, the Staff Senate, the Graduate
Student Assembly, and the Student Government Association) sufficiently well informed that relevant advice and counsel from outside the Commission proper can be brought to bear at the policy (program) formulation stage.

A. For all Commissions, it is the responsibility of individual Commission members, mainly by means of their cross-representational affiliations, to keep affiliated governance bodies and constituencies informed and to afford the opportunity for consultative referral.

B. Those Commissions that deal with issues for which the faculty have primary responsibility, that is, the Commission on Faculty Affairs, the Commission on Research, the Commission on Undergraduate Studies and Policies, and the Commission on Graduate Studies and Policies, shall consult with the Faculty Senate. All Commissions shall consult with the four formal constituent groups at the beginning of and during the process of developing resolutions. The four groups are identified as: Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association.

C. Upon first reading at the Commission, resolutions shall be referred by the Commission to the four constituent groups (Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association) for the purpose of issuing to provide each group the opportunity to issue a formal recommendation, unless the Faculty Senate the respective constituent group waives its right to do so (see subsection E. below). The Faculty Senate Each respective constituent group shall send its recommendation to the Commission upon the conclusion of its next regularly scheduled meeting, but in all cases within four weeks (counted while the University is in session). (Failure of a constituent group to forward its recommendation to the Commission within four weeks will not delay a resolution from progressing to University Council.) Any additional changes made to the resolution before its adoption by the Commission will be communicated to the Faculty Senate four constituent groups for their consideration by the Senate in formulating its each group’s final recommendation to University Council. In addition, the Commission may request additional input from the Faculty Senate any of the groups before the final version of the resolution is completed.

D. The Commission will send the its final version of the resolution to the Faculty Senate constituent groups upon the Commission’s approval. The Faculty Senate groups will send its their final recommendation(s) to University Council for consideration by Council. To be considered by University Council, any recommendations must be sent by the respective constituent group to the Secretary of University Council prior to the date of first reading at University Council. The Senate’s recommendation(s) of the group(s) will become a permanent appendix to the resolution not subject to revision or amendment by the Commission or by University Council.

E. Waivers of the Referral process in subsection C. above may be conditional or unconditional and maybe issued at any time during the discussion of the resolution by the Commission. Waivers become operative when submitted to the Commission chair by a Faculty Senate officer designated representative(s) of the respective constituent group.

WITH CHANGES INCORPORATED:

2. In preparing the case for a new policy or program, each Commission shall keep constituencies (and also, as appropriate, other Commissions, the Faculty Senate, the Staff Senate, the Graduate
Student Assembly, and the Student Government Association) sufficiently well informed that relevant advice and counsel from outside the Commission proper can be brought to bear at the policy (program) formulation stage.

A. For all Commissions, it is the responsibility of individual Commission members, mainly by means of their cross-representational affiliations, to keep affiliated governance bodies and constituencies informed and to afford the opportunity for consultative referral.

B. All Commissions shall consult with the four formal constituent groups at the beginning of and during the process of developing resolutions. The four groups are identified as: Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association.

C. Upon first reading at the Commission, resolutions shall be referred by the Commission to the four constituent groups (Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association) to provide each group the opportunity to issue a formal recommendation, unless the respective constituent group waives its right to do so (see subsection E. below). Each respective constituent group shall send its recommendation to the Commission upon the conclusion of its next regularly scheduled meeting, but in all cases within four weeks (counted while the University is in session). (Failure of a constituent group to forward its recommendation to the Commission within four weeks will not delay a resolution from progressing to University Council.) Any additional changes made to the resolution before its adoption by the Commission will be communicated to the four constituent groups for their consideration in formulating each group’s final recommendation to University Council. In addition, the Commission may request additional input from any of the groups before the final version of the resolution is completed.

D. The Commission will send its final version of the resolution to the constituent groups upon the Commission’s approval. The groups will send their final recommendation(s) to University Council for consideration by Council. To be considered by University Council, any recommendations must be sent by the respective constituent group to the Secretary of University Council prior to the date of first reading at University Council. The recommendation(s) of the group(s) will become a permanent appendix to the resolution not subject to revision or amendment by the Commission or by University Council.

E. Waivers of the Referral process in subsection C. above may be conditional or unconditional and maybe issued at any time during the discussion of the resolution by the Commission. Waivers become operative when submitted to the Commission chair designated representative(s) of the respective constituent group.
Approval and acceptance of newly granted powers of shared governance to the Student Government Association as a result of a Governance Task Force's findings

WHEREAS, a joint resolution calling for the creation of a Governance Task Force was presented by the Commission on Student Affairs and the Commission on Faculty Affairs and was later passed by University Council and approved by President Sands; and

WHEREAS, this Governance Task Force concluded their research with the findings that all four constituent groups: Faculty Senate, Staff Senate, Graduate Student Assembly, and the Student Government Association would benefit from a new system of shared governance; and

WHEREAS, this new system would grant our Organization power to issue a formal recommendation to any resolution being considered by a University Commission;

THEREFORE BE IT RESOLVED, that the Student Government Association of Virginia Tech hereby approves and welcomes the recommended changes to Article II, Section 2 of the University Council by-laws regarding a new process for shared governance power.

Chair of the General Assembly

President of Student Government Association

9-29-17

9-29-17
WHEREAS, in 2011 the Board of Visitors (the Board) authorized the establishment of the Staff Career Achievement Award to recognize retiring staff members who have distinguished themselves through their exemplary performance over a long period of time; and

WHEREAS, the award program approved by the Board specified that up to five exemplary staff retirees could be recognized each year; and

WHEREAS, the number of staff retirees has increased and the number of nominations has increased since the program’s inception; and

WHEREAS, the Staff Career Achievement Award Selection Committee, as well as the Staff Senate and Commission on Staff Affairs and Policies, has recommended that the university expand the number of award recipients to ensure distinguished staff can be recognized; and

WHEREAS, the Division of Human Resources oversees the award program nomination and selection process and fully supports expanding the number of award recipients in year’s where there are more than five exemplary retired staff; and

WHEREAS, the university recommends no changes to the nomination criteria (Nominees must have served a minimum of ten years at Virginia Tech and have a history of outstanding performance in their position.).

NOW, THEREFORE, BE IT RESOLVED, that the Board delegate authority to manage Staff Career Achievement Award nomination and selection process to the Vice President for Human Resources.
WHEREAS, emerging science and technology present new and unanticipated social, political, and ethical consequences; and

WHEREAS, Science, Technology, and Society (STS) is a growing interdisciplinary field that brings together conceptual and methodological frameworks from the social sciences and humanities to develop ways of understanding and intervening in the relationship of science and technology to society; and

WHEREAS, public and private organizations increasingly require management, communication, marketing, and research personnel who have a thorough knowledge of the social and ethical dimensions of emerging science and technology; and

WHEREAS, there is currently no undergraduate degree in Science, Technology, and Society offered at institutions of higher education in Virginia; and

WHEREAS, the Bachelor of Arts in STS embodies the elements of the “VT-shaped Individual,” with depth in the specialized concepts and frameworks of STS, transdisciplinary skills, and problem-driven, experiential learning; and

WHEREAS, the Department of Science, Technology, and Society at Virginia Tech is a leading department in graduate instruction and research in the field and already offers a range of undergraduate courses, providing about two thousand credit hours of undergraduate instruction per year;

THEREFORE BE IT RESOLVED that the Bachelor of Arts in Science, Technology, and Society be approved effective Spring 2019 and the proposal forwarded to the President, the Board of Visitors, and the State Council of Higher Education for Virginia (SCHEV) for approval.
March 20, 2017

To: CLAHS Undergraduate Curriculum Committee
From: Daniel Breslau, Chair, Department of Science and Technology in Society
Re: Proposal for new undergraduate degree

On behalf of the STS Department, I approve of the Department’s proposal for a new undergraduate degree, with Bachelor of Arts and Bachelor of Science options. Initiation of the program will not require additional department resources.
Virginia Tech Degree Proposal
Bachelor of Arts/Bachelor of Science in Science, Technology, and Society
(CIP: 30.1501)

Type of degree action: New

Program Description
The Department of Science, Technology, and Society is proposing a new Undergraduate Degree Program in Science, Technology, and Society. The program will offer both a Bachelor of Arts and a Bachelor of Science. The program anticipates admitting its first students in spring of 2019, and will begin awarding degrees in 2021.

The field of Science, Technology, and Society studies the relationship of science and technology to their social, political, and cultural contexts. It examines the ways that the development of technologies and the course of scientific research are shaped by their social settings, and in turn, the ways that scientific and technological developments impact society.

As an interdisciplinary field, Science, Technology, and Society draws from the social sciences and humanities, particularly from Anthropology, Sociology, History, and Philosophy. The field has also developed its own concepts and frameworks, which have proven particularly revealing in the study of the social dimensions of technical fields. Central concerns of the field include the politics of expertise, public deliberation on science and technology policy, the social consequences of molecular biology and associated technologies, innovation as a social process, information technologies and social change.

In addition to advancing knowledge of this subject area, the field of STS has a strong tradition of practical involvement in the interface between society and the technical fields of science and technology. STS scholars and practitioners work with scientists and engineers to incorporate a greater awareness of the social and ethical consequences of their work into their professional work itself. And STS-trained professionals work with citizens’ groups and other stakeholders to translate and interpret scientific and technological developments in terms of their risks, benefits, and other social consequences. They can often facilitate informed public involvement in deliberation over policy responses. Faculty in STS at Virginia Tech are already working on projects involving reshaping the training of engineers, developing strategies for disaster response, and involving citizens in research on environmental health risks.

The program will build on existing strengths of faculty in the Department of Science, Technology, and Society and the graduate program in Science and Technology Studies. Active scholarship of faculty, with strengths in science and technology policy, energy and environmental issues, engineering studies, biomedicine and society, will expose undergraduates to the state of the art in STS research and public outreach.

The Undergraduate Degree Program in STS has six emphases:

1. The study of STS as a set of perspectives, concepts, and methods that apply across a broad range of issues for research and active intervention involving science and technology.
2. A focus on contemporary problems involving science and technology, developing approaches to those problems that take into account their social dimensions and social consequences.
3. Real-world engagement through experiential and collaborative learning.
4. Acquisition of a set of transdisciplinary skills, including technological literacy, professional presentations, research design, critical thinking, and managing collaborative projects.
5. **For the Bachelor of Arts degree**, advanced knowledge in humanistic and social science perspectives on science and technology.
6. **For the Bachelor of Science degree**, technical literacy at an advanced undergraduate level, in a specialized area of science and technology.

In the degree’s core, students will learn general conceptual tools and perspectives of STS. But beyond the introductory course (STS 1504), these are taught in conjunction with specific contemporary problem areas: environment, biomedicine and the life sciences, global science and technology policy, and innovation.

The core includes an innovative course on the practice of collaborative research (STS 3504 Collaborative Research in Science, Technology, and Society). The course combines research methods with hands-on experience in collaborative work on a social problem involving science and/or technology. During alternate years, the collaborative methods course will be coupled with the STS Department’s Choices and Challenges Forum. This is a public forum on an area of science and technology that is of pressing public concern. Students in the STS Collaborative Methods course will participate in developing information materials for the forum, designing background sessions, and will interact with invited panelists in a closed workshop setting.

Furthermore, all students in the program will specialize in a focus area, where they will take 9 credit hours to acquire technical literacy and deeper knowledge of one area. The focus areas will initially consist of Energy and Environment, Medicine and Life Sciences, and Engineering and Innovation, with a fourth option consisting of a custom focus area that students design in consultation with their advisor.

The capstone, STS 4304, will provide an opportunity to pursue supervised individual research related to the student’s focus area, while gaining experience in presentation and critique in a seminar setting. Students in the STS program will compile a research portfolio based on their projects in the Collaborative Methods course and the STS Capstone.

Students will complete the program with either a Bachelor of Arts or a Bachelor of Science degree. The BA is appropriate for students seeking a broad liberal arts degree, requiring additional upper-level courses in perspectives on science and technology from the humanities, social science and arts. The Bachelor of Science allows students to combine the STS requirements with a more advanced program of study in a scientific or technological area that is linked to their STS focus area.

**Curriculum Summary**

**I. Pathways to General Education (45 credits)**

Distributive Pathway:
- Discourse (9 credits)
- Quantitative and Computational Thinking (9 credits)
- Reasoning in the Natural Sciences (6 credits)
- Critique and Practice in Design and the Arts (6 credits)
- Reasoning in the Social Sciences (6 credits)
Critical Thinking in the Humanities (6 credits)
Critical Analysis of Identity and Equity in the United States (3 credits)
Pathways requirements may also be fulfilled through a Pathways Minor or Alternative Pathway.

II. STS Degree Core Requirement (21 credit hours)
STS Core Sequence
STS 1504: Introduction to Science, Technology, and Society (3 cr)
STS 3504: The Practice of Collaborative Research in STS (3 cr)
STS 4304: Contemporary Issues in Science, Technology, and Society (3 cr)
Core area requirements
STS 2154: Humanities, Technology and the Life Sciences (3 cr)
STS 2254: Innovation in Context (3 cr)
STS 2454: Science, Technology, and the Environment (3 cr)
STS 2444: Global Science and Technology Policy (3 cr)

III. Focus Area Restricted Electives (9 credit hours)
Nine credit hours in one of the following focus areas
Energy and Environment (three of the following):
ENGL 3534: Literature and Ecology (3 cr)
GEOG/NR 1115-1116: Seeking Sustainability^1 (3 cr)
GEOG 3104: Environmental Problems, Population, and Development (3 cr)
HIST 3144: American Environmental History (3 cr)
PHIL 2304: Global Ethics (3 cr)
STS 3334: Energy and Society (3 cr)
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives (3 cr)
UAP 3354: Introduction to Environmental Policy and Planning (3 cr)

Engineering and Innovation (three of the following):
ENGE 2004: Citizen Engineering (3 cr)
ENGL 3844: Writing and Digital Media (3 cr)
HIST/SOC/STS 2604: Introduction to Data in Social Context (3 cr)
HIST/STS 2715, 2716: History of Technology (3 cr)
HIST 3114: United States Business History (3 cr)
MGT 3064: Cornerstones of Entrepreneurship and Innovation (3 cr)
STS/HIST 2054: Engineering Cultures (3 cr)

Life Sciences and Biomedicine (three of the following):
ENGL 3154: Literature, Medicine, and Culture (3 cr)
ENGL/STS 4314: Narrative Medicine (3 cr)
HIST 3624: Health and Illness in African History (3 cr)
HIST 3714: War and Medicine (3 cr)
HIST 3724: History of Disease, Medicine, and Health (3 cr)
HIST/STS 3734: History of Modern Biology (3 cr)
PHIL 3324: Biomedical Ethics (3 cr)

^1 Only one course of the two-course sequence can be counted toward the STS focus area requirement.
PHIL 4604: Philosophy of Biology (3 cr)
SOC 3714: Sociology of Aging (3 cr)
SOC 4704 Medical Sociology (3 cr)
STS 3284: Technology and Disability (3 cr)
STS 3314: Medical Dilemmas and Human Experience (3 cr)
WGS/SOC/STS 3324: Perspectives on the Biology of Women (3 cr)
WGS/SOC/STS 4334: Sexual Medicine (3 cr)
WGS/STS 4704: Gender and Science (3 cr)

Custom Focus Area, designed with academic advisor (9 credits)

IV. For the Bachelor of Arts Degree: Advanced perspectives from the humanities and social sciences (6 credit hours)
Two additional courses at the 3000-level or higher, and approved by the academic advisor, related to science and technology from the perspective of humanities, social sciences, or the arts. For example, a student in the Engineering and Innovation focus area might fulfill this requirement with CINE 3224 Documentary Cinema Production and CINE 3184 Cinema Production Topics.

For the Bachelor of Science Degree: Specialized study in science and technology (6 credits)
Two additional courses at the 3000-level or higher in a technical area outside of social sciences and humanities related to the student’s focus area, and approved by the academic advisor. These must be courses with subject matter in science, mathematics, technology, or engineering. For example, a student in the Energy and Environment focus area pursuing the Bachelor of Science Degree might fulfill this requirement with BIOL 3114: Field and Laboratory Ecology (3), and BIOL 4004: Freshwater Ecology (3).

V. Free electives (39 credits)

Relevance to university mission and strategic planning
The BA/BS in Science, Technology, and Society is designed to harmonize with the university’s goals of developing “VT-shaped individuals.” First, it will provide disciplinary knowledge in the form of STS as a comprehensive way of thinking about the relationship of science and technology to society. This involves a set of specialized concepts and frameworks developed expressly for studying and understanding technical fields as thoroughly intertwined with social, cultural, and political realities.

Second, the curriculum will provide cross-cutting skills such as research design, managing collaborative projects, policy development and evaluation, writing and speaking skills for public engagement. Focus areas and specialization requirements will provide students with literacy in a specific problem area. Students in the Bachelor of Science option will undertake further study in a technical area.

Third, the program will provide guided experiential learning in the 3000-level core course on the practice of collaborative research and in the STS capstone. Students will be encouraged to pursue internships related to their STS studies. The STS Department has piloted a summer course for students pursuing internships in the National Capital Region.
Finally, the program will promote informal communal learning through co-curricular activities using existing departmental resources: undergraduate research symposia, guest speakers, presentations of student work in the ST Global student meeting held annually in the National Capital Region.

**Destination areas:** Students in the STS program will be able to combine their degree requirements in STS with a major in any of the planned Destination Areas. The STS program will complement work in a Destination Area by providing social science and humanities perspectives on the area’s subject matter. The major will also include courses that fit within specific destination areas, allowing students to count STS courses toward a Destination Area major. For instance, our courses in Engineering and Innovation might count toward a major in Intelligent Infrastructures and Human-Centered Design.

Other planned features of the program that relate directly to the VT mission and strategic plan:
- With our department’s presence in the National Capitol Region, we will initiate undergraduate activities there, offering summer courses that will provide an opportunity to combine internships with classroom study and research.
- The program combines transdisciplinary competence with specialization. It pursues general learning outcomes, with regard to interdisciplinary and transdisciplinary perspectives and methods of STS, and specialized learning outcomes, requiring the application of those tools in the process of developing deep knowledge of a particular focus area.

**Justification**

The establishment of a Bachelor of Arts/Bachelor of Science in Science, Technology, and Society at Virginia Tech will answer two related and growing demands. On one hand, Virginia Tech attracts many students with strong interests in science and technology, but who are not interested in majoring in engineering or in specializing solely in a scientific field. They are drawn to science and technology through personal interest and an awareness of the pervasive influence of science and technology in modern life. They will be seeking the range of skills typically acquired in a liberal arts degree, such as writing, public speaking, research, but coupled with technological literacy and a focus on specific areas of science and technology.

On the other hand, employers and graduate programs are increasingly placing a high value on college graduates who are neither engineers nor science majors, but who are effective problem solvers due to their understanding of the ways that science and technology interact with social life, culture, and politics.

Science, Technology, and Society (STS) bridges these two growing demands. It provides students with an understanding of the ways that science and technology are embedded in social life, as well as practical conceptual frameworks and methods for pursuing interdisciplinary solutions to contemporary problems. Combined with literacy in one or more areas of science and technology, analytic and writing abilities, and experience in collaborative work, these students will acquire a highly valued and marketable set of competencies.

An undergraduate STS degree is excellent preparation for any career that calls for a liberal arts degree, but with special relevance to science and technology-rich fields, such as science communication, technology marketing and management, environmental organizations, research
administration, science policy, military careers, and museum work. And it prepares students for graduate and professional study in areas such as Business, Law, Health Professions, Information Science, and Environmental Policy.

**Student demand**

Science, Technology, and Society is a growing field, nationally and internationally. The College Board lists STS undergraduate programs at 68 higher education institutions in the U.S., including public land-grant schools such as Penn State, University of California at Davis, and North Carolina State University. Ohio State University has recently added a concentration in STS within its Comparative Studies major. In our region, at North Carolina State University, the STS undergraduate degree program has over 110 students currently enrolled. There are no undergraduate degree programs in Science, Technology, and Society in public higher education institutions in Virginia.

The department’s undergraduate courses have experienced consistently high enrollment. The introductory course in STS has filled to its capacity of 120 students for the past two years. Other courses that will be included in the degree program indicate a strong student interest in the subject matter.

We recently surveyed students enrolled in STS 1504, Introduction to Science, Technology, and Society. Out of 67 responses, 30, or 45% indicated that they were “extremely interested” or “somewhat interested” in the degree program in STS. Of the 25 students who had not yet declared a major 12, or 48% indicated that they were either “extremely interested” or “somewhat interested” in the STS degree program.

**Market demand**

The STS degree program combines instruction and real-world application of communication skills, both written and oral; powerful conceptual frameworks for understanding the social and cultural dimensions of science and technology; and focused knowledge of a particular problem domain. Graduates of the program will be well prepared for positions that require writing, speaking, research, and analytic skills in science- and technology-rich settings.

A growing body of knowledge suggests that pay is not only growing for graduates of liberal arts programs, but that their long-term earning potential is comparable to, or outpacing that of graduates of STEM programs. The *Wall Street Journal* writes, “When asked to define the résumé traits that matter most, however, the NACE-surveyed employers rated technical skills 10th. Four of the top five traits were hallmarks of a traditional liberal-arts education: teamwork, clear writing, problem-solving aptitude and strong oral communications. Mindful of those longer-term needs, some employers end up hiring humanities and social-sciences graduates, even if such majors aren’t explicitly singled out when recruiting.”

The *World Economic Forum* report, ‘The Future of Jobs,’ confirms the importance of these skills. The top five desired traits for employees in 2020 include complex problem solving, critical thinking, creativity, people management, and coordinating with others – all trademarks of degree programs emerging from the liberal arts.

---

Yet these traits must be tailored for a rapidly changing and evolving world marketplace. The same report from which the above skills are derived notes that technological developments are driving commerce, development, and production in disruptive ways. “Developments in previously disjointed fields such as artificial intelligence and machine learning, robotics, nanotechnology, 3D printing and genetics and biotechnology are all building on and amplifying one another. Smart systems—homes, factories, farms, grids or entire cities—will help tackle problems ranging from supply chain management to climate change. Concurrent to this technological revolution are a set of broader socioeconomic, geopolitical and demographic developments.” Thus, not only do graduates need to build desirable traits, they must be familiar with new and emerging scientific and technological environments.

**Required resources**
The program can be implemented with existing departmental resources. As enrollment reaches our five-year target, it may require a half-time academic advisor and an additional graduate teaching assistantship. A future faculty position in STS approaches to information technology would allow us to add an additional focus area, but is not necessary for initiating the program.

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>ESTIMATED COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>$0</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>$15000/yr., starting in year 5</td>
</tr>
<tr>
<td>Graduate Teaching/Graduate Research Assistant</td>
<td>$32000/yr., starting in year 5 (includes tuition and stipend)</td>
</tr>
<tr>
<td>Space</td>
<td>$0</td>
</tr>
<tr>
<td>Library</td>
<td>$0</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0</td>
</tr>
<tr>
<td>Other</td>
<td>$1000 (printing, web design, publicity, information events)</td>
</tr>
</tbody>
</table>
I. STS Degree Core Requirements (21 credit hours)

STS 1504 Introduction to Science, Technology, and Society 3 cr ________________

STS 3504 The Practice of Collaborative Research for Science, Technology, and Society (Pre: 1504, and one of 2154 or 2444 or 2454 or 2254) 3 cr ________________

STS 4304 Contemporary Issues in Science, Technology, and Society (Pre: 1504) 3 cr ________________

STS 2154 Humanities, Technology, and the Life Sciences 3 cr ________________

STS 2254 Innovation in Context 3 cr ________________

STS 2444 Global Science and Technology Policy 3 cr ________________

STS 2454 Science, Technology, and the Environment 3 cr ________________

II. STS Focus Area Restricted Electives (9 credit hours)

Complete 9 hours of courses in one of the following areas

1. Engineering and Innovation
   - ENGE 2004: Citizen Engineering 3 cr ________________
   - ENGL 3844: Writing and Digital Media (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr ________________
   - HIST/SOC/STS 2604: Introduction to Data in Social Context 3 cr ________________
   - HIST/STS 2715, 2716: History of Technology
   - HIST 3114: United States Business History
   - MGT 3064: Cornerstones of Entrepreneurship and Innovation
   - STS/HIST 2054: Engineering Cultures

2. Energy and Environment
   - ENGL 3534: Literature and Ecology (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr ________________
   - GEOG/NR 1115-1116: Seeking Sustainability¹ (Pre: 1115 for 1116) 3 cr ________________

¹ Only one course of the two-course sequence can be counted toward the STS focus area requirement.
GEOG 3104: Environmental Problems, Population, and Development  
HIST 3144: American Environmental History  
PHIL 2304: Global Ethics  
STS 3334: Energy and Society  
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives  
UAP 3354: Introduction to Environmental Policy and Planning

3. Life Sciences and Biomedicine  
ENGL 3154: Literature, Medicine, and Culture (Pre: ENGL 1106 or 1204H or COMM 1016)  
ENGL/STS 4314: Narrative Medicine (Pre: ENGL 3154 or 3324)  
HIST 3624: Health and Illness in African History  
HIST 3714: War and Medicine  
HIST 3724: History of Disease, Medicine, and Health  
HIST/STS 3734: History of Modern Biology  
PHIL 3324: Biomedical Ethics  
PHIL 4604: Philosophy of Biology  
SOC 3714: Sociology of Aging (Pre: 1004)  
SOC 4704 Medical Sociology (Pre: 1004)  
STS 3284: Technology and Disability  
STS 3314: Medical Dilemmas and Human Experience  
WGS/SOC/STS 3324: Perspectives on the Biology of Women (Pre: WGS 1824)  
WGS/SOC/STS 4334 Sexual Medicine (Pre: WGS 1824)  
WGS/STS 4704: Gender and Science (Pre: WGS 2244 or STS 1504)

4. Custom Focus Area  
Nine credit hours in a selected specialty of Science, Technology, and Society, approved by academic advisor

III. Specialized Study in Science and Technology (6 credit hours)  
Two additional courses at the 3000-level or higher in a technical area outside of social sciences and humanities related to the student’s focus area, and approved by the academic advisor. These must be courses with subject matter in science, mathematics, technology, or engineering. Please refer to the Prerequisites section, below.
IV. Pathways to General Education (45 credit hours)

STS courses outside of the 21-credit core may be counted toward the Pathways requirements.

<table>
<thead>
<tr>
<th>Pathway Area</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse (9 credit hours)</td>
<td>3 cr</td>
</tr>
<tr>
<td>Quantitative and Computational Thinking (9 credit hours)</td>
<td>3 cr</td>
</tr>
<tr>
<td>Reasoning in the Natural Sciences (6 credit hours)</td>
<td>3 cr</td>
</tr>
<tr>
<td>Critique and Practice in Design and the Arts (6 credit hours)</td>
<td>3 cr</td>
</tr>
<tr>
<td>Reasoning in the Social Sciences (6 credit hours)</td>
<td>3 cr</td>
</tr>
<tr>
<td>Critical Thinking in the Humanities (6 credit hours)</td>
<td>3 cr</td>
</tr>
<tr>
<td>Critical Analysis of Identity and Equity in the United States</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Pathways to General Education Credits can also be fulfilled through a Pathways Minor or Alternative Pathway.

V. Free electives (39 credit hours)

<table>
<thead>
<tr>
<th>Elective 1</th>
<th>Elective 2</th>
<th>Elective 3</th>
<th>Elective 4</th>
<th>Elective 5</th>
<th>Elective 6</th>
<th>Elective 7</th>
<th>Elective 8</th>
<th>Elective 9</th>
<th>Elective 10</th>
<th>Elective 11</th>
<th>Elective 12</th>
<th>Elective 13</th>
<th>Elective 14</th>
<th>Elective 15</th>
</tr>
</thead>
</table>

VI. Foreign Language

Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six semester hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement do not count toward the hours required for graduation. Please consult the Undergraduate Catalog for details.
Prerequisites
Some courses listed on this checksheet have prerequisites, please consult the University Course Catalog, or check with your advisor.

Graduation Requirements
- Minimum of 120 credit hours for the degree
- In-major GPA (courses in sections I, II, III, above) must be 2.0 or higher.
- Minimum overall GPA of 2.0.

Satisfactory Progress Policy
In addition to the satisfactory progress toward a degree policy required by the University, satisfactory progress toward a B.S. in STS requires that upon having attempted 72 semester hours (including transfer, AP, advanced standing, and credit by exam) an STS student must have:
- Completed at least 9 credits of the STS core requirements (Section I, above)
- At least a 2.0 overall GPA
- At least a 2.0 in-major GPA.

In-major courses include all STS core courses (Section I), Focus Area requirements (II), and Specialized Study in Science and Technology (III).
approval for English courses on STS check sheet

Bernice Hausman <bhausman@vt.edu>  
To: Daniel Breslau <dbreslau@vt.edu>, Virginia C Fowler <vfowler@vt.edu>

Mon, Jan 30, 2017 at 11:17 AM

Dear Daniel:

The Department of English endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the ENGL courses listed below as electives. The English Department will be able to support the additional student enrollment up to existing capacity, and welcomes the opportunity to teach students in the STS undergraduate major:

ENGL 3154 Literature, Medicine, and Culture  
ENGL 4314: Narrative Medicine  
ENGL 3844: Writing and Digital Media  
ENGL 3534 Literature and Ecology  
ENGL 4874: Issues in Professional and Public Discourse  

Sincerely,

BH

Bernice L. Hausman

Chair, Department of English, Virginia Tech  
Edward S. Diggs Professor in the Humanities  
Professor, Virginia Tech Carilion School of Medicine

540-231-8466  
bhausman@vt.edu
ENGE 2004 Citizen Engineering

2 messages

Donna Riley <dmriley@vt.edu>
To: Daniel Breslau <dbreslau@vt.edu>

The Department of Engineering Education endorses the proposed undergraduate degree program in Science, Technology, and Society, and supports the inclusion of ENGE 2004 Citizen Engineering. The Department welcomes the enrollment of additional students in these courses, and we acknowledge no additional resources are needed.

Thanks,

Donna

------------------------------------
Donna Riley, Ph.D.
Professor and Interim Head
Department of Engineering Education
Affiliate Faculty, Science, Technology, & Society
Affiliate Faculty, Women's & Gender Studies
Virginia Polytechnic Institute and State University

Gender pronouns: she/her, they/them

349 Goodwin Hall
635 Prices Fork Rd.
Blacksburg, VA, USA 24061
dmriley@vt.edu

Daniel Breslau <dbreslau@vt.edu>
To: me@onenote.com

[Quoted text hidden]

--

Daniel Breslau
Associate Professor and Chair
Department of Science and Technology in Society
Virginia Tech
133 Lane Hall
Blacksburg, VA 24061-0247
(540) 231-8472 (work)
(540) 449-9791 (mobile)
approval for listing HIST courses in new STS major

Mark Barrow <mabarro2@vt.edu>
To: Daniel Breslau <dbreslau@vt.edu>
Cc: Heather Gumbert <hgumbert@vt.edu>

Dear Daniel,

By this note I am granting permission for the following HIST course to be added to the new STS major:

- HIST 3144 American Environmental History
- HIST 3724 Disease, Medicine, and Health
- HIST 3624 Health and Illness in African History
- HIST 3714 War and Medicine
- HIST 3734 History of Modern Biology
- HIST 3114 History of Capitalism
- HIST 3715, 3716: History of Technology (changing to 2715-16 by fall 2017)
- HIST 2604 Introduction to Data in Social Context (when approved)

We plan to offer these courses regularly, and adding them to your checksheet will require no additional resources.

Please let me know if you need anything else.

Best,
Mark Barrow

Mark V. Barrow, Jr.
Professor and Chair
Department of History (0117)
Virginia Tech
Blacksburg, VA 24060
540-231-4099
The Department of Management endorses the proposed undergraduate degree program in Science, Technology, and Society, and supports the inclusion of the MGT 3064 Cornerstones of Entrepreneurship and Innovation. The department welcomes the enrollment of additional students in this course, and we acknowledge no additional resources are needed.

Best regards.

Devi

Devi R. Gnyawali, Ph.D.
R. B. Pamplin Professor and Department Head
Department of Management (mail code 0233), 2007 Pamplin Hall
880 West Campus Drive, Blacksburg, VA 24061
Email: devi@vt.edu
Phone: 540-231-6353
Associate Editor, Journal of Management
http://www.management.pamplin.vt.edu/devi-r-gnyawali/
February 3, 2017

Dear Curriculum Committee:

The Department of Sociology endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the SOC courses listed below as electives. The department welcomes the enrollment of additional students in these courses, and we acknowledge no additional resources are needed.

SOC 3714 Sociology of Aging
SOC 4704 Medical Sociology

Sincerely,

John Ryan
Professor and Chair
February 1, 2017

RE: Letter of Support for UAP Courses for New Undergraduate Degree in Science, Technology, and Society

The Urban Affairs and Planning Program (UAP) endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the UAP courses listed below as electives. We welcome the enrollment of additional students in this course, and we expect that no additional resources will be needed.

UAP 3344 (PSCI 3344): Global Environmental Issues: Interdisciplinary Perspectives

UAP 3354: Introduction to Environmental and Policy Planning

UAP 4214: WOMEN, ENVIRONMENT AND DEVELOPMENT IN A GLOBAL PERSPECTIVE

UAP 4264: ENVIRONMENTAL ETHICS AND POLICY

UAP 4394: COMMUNITY RENEWABLE ENERGY SYSTEMS

Please contact me if you have any questions or comments.

Sincerely,

Thomas W. Sanchez, PhD
Chair & Professor, Urban Affairs and Planning
tom.sanchez@vt.edu
Monday, February 13, 2017

The Program of Women's and Gender Studies (WGS) in the Department of Sociology endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the WGS courses listed below as electives. The Program welcomes the enrollment of additional students in this course, and we acknowledge no additional resources are needed:

- WGS 4704 Gender and Science
- WGS 3324 Perspectives on the Biology of Women
- WGS 4334 Sexual Medicine

We are very excited to have these doubly listed options for STS and WGS.

My very best,

Sharon P. Johnson
Director of WGS
Memorandum

TO: CLAHS Undergraduate Curriculum Committee
FROM: Douglas Lind
Head, Department of Philosophy
RE: Proposed undergraduate degree program in STS
DATE: March 21, 2017

The Department of Philosophy endorses the proposed undergraduate degree program in Science, Technology, and Society (STS) and supports the inclusion of the Philosophy courses listed below as electives. The Philosophy Department welcomes the enrollment of additional students in these courses, and we acknowledge no additional resources are needed.

PHIL 2304: Global Ethics
PHIL 3324: Biomedical Ethics
PHIL 4604: Philosophy of Biology

Douglas Lind
April 19, 2017

Daniel Breslau  
Science and Technology in Society, 0247  
Virginia Tech

Dear Dr. Breslau,

The Department of Geography is pleased to endorse the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the GEOG courses listed below as electives. The Department welcomes the enrollment of additional students in these courses, and we acknowledge that no additional resources are needed. Specifically, we grant permission to include the following Geography courses as electives:

GEOG 1115-1116 (NR 1115-1116): Seeking Sustainability  
GEOG 3104 Environmental Problems, Population, & Development

Sincerely,

Korine Kolivras  
Associate Professor and Co-Chair
WHEREAS, emerging science and technology present new and unanticipated social, political, and ethical consequences; and

WHEREAS, Science, Technology, and Society (STS) is a growing interdisciplinary field that brings together conceptual and methodological frameworks from the social sciences and humanities to develop ways of understanding and intervening in the relationship of science and technology to society; and

WHEREAS, organizations of many kinds are reporting a need for college graduates with a combination of liberal arts skills – writing, research, critical thinking, collaboration – and advanced scientific or technological literacy; and

WHEREAS, there is currently no undergraduate degree in Science, Technology, and Society offered at institutions of higher education in Virginia; and

WHEREAS, the Bachelor of Science in STS embodies the elements of the “VT-shaped Individual,” with depth in the specialized concepts and frameworks of STS, transdisciplinary skills, and problem-driven, experiential learning; and

WHEREAS, the Department of Science, Technology, and Society at Virginia Tech is a leading department in graduate instruction and research in the field and already offers a range of undergraduate courses, providing about two thousand credit hours of undergraduate instruction per year;

THEREFORE BE IT RESOLVED that the Bachelor of Science in Science, Technology, and Society be approved effective Spring 2019 and the proposal forwarded to the President, the Board of Visitors, and the State Council of Higher Education for Virginia (SCHEV) for approval.
March 20, 2017

To: CLAHS Undergraduate Curriculum Committee
From: Daniel Breslau, Chair, Department of Science and Technology in Society
Re: Proposal for new undergraduate degree

On behalf of the STS Department, I approve of the Department’s proposal for a new undergraduate degree, with Bachelor of Arts and Bachelor of Science options. Initiation of the program will not require additional department resources.
Virginia Tech Degree Proposal
Bachelor of Arts/Bachelor of Science in Science, Technology, and Society
(CIP: 30.1501)
Type of degree action: New

Program Description
The Department of Science, Technology, and Society is proposing a new Undergraduate Degree Program in Science, Technology, and Society. The program will offer both a Bachelor of Arts and a Bachelor of Science. The program anticipates admitting its first students in spring of 2019, and will begin awarding degrees in 2021.

The field of Science, Technology, and Society studies the relationship of science and technology to their social, political, and cultural contexts. It examines the ways that the development of technologies and the course of scientific research are shaped by their social settings, and in turn, the ways that scientific and technological developments impact society.

As an interdisciplinary field, Science, Technology, and Society draws from the social sciences and humanities, particularly from Anthropology, Sociology, History, and Philosophy. The field has also developed its own concepts and frameworks, which have proven particularly revealing in the study of the social dimensions of technical fields. Central concerns of the field include the politics of expertise, public deliberation on science and technology policy, the social consequences of molecular biology and associated technologies, innovation as a social process, information technologies and social change.

In addition to advancing knowledge of this subject area, the field of STS has a strong tradition of practical involvement in the interface between society and the technical fields of science and technology. STS scholars and practitioners work with scientists and engineers to incorporate a greater awareness of the social and ethical consequences of their work into their professional work itself. And STS-trained professionals work with citizens’ groups and other stakeholders to translate and interpret scientific and technological developments in terms of their risks, benefits, and other social consequences. They can often facilitate informed public involvement in deliberation over policy responses. Faculty in STS at Virginia Tech are already working on projects involving reshaping the training of engineers, developing strategies for disaster response, and involving citizens in research on environmental health risks.

The program will build on existing strengths of faculty in the Department of Science, Technology, and Society and the graduate program in Science and Technology Studies. Active scholarship of faculty, with strengths in science and technology policy, energy and environmental issues, engineering studies, biomedicine and society, will expose undergraduates to the state of the art in STS research and public outreach.

The Undergraduate Degree Program in STS has six emphases:
1. The study of STS as a set of perspectives, concepts, and methods that apply across a broad range of issues for research and active intervention involving science and technology.
2. A focus on contemporary problems involving science and technology, developing approaches to those problems that take into account their social dimensions and social consequences.
3. Real-world engagement through experiential and collaborative learning.
4. Acquisition of a set of transdisciplinary skills, including technological literacy, professional presentations, research design, critical thinking, and managing collaborative projects.

5. **For the Bachelor of Arts degree**, advanced knowledge in humanistic and social science perspectives on science and technology.

6. **For the Bachelor of Science degree**, technical literacy at an advanced undergraduate level, in a specialized area of science and technology.

In the degree’s core, students will learn general conceptual tools and perspectives of STS. But beyond the introductory course (STS 1504), these are taught in conjunction with specific contemporary problem areas: environment, biomedicine and the life sciences, global science and technology policy, and innovation.

The core includes an innovative course on the practice of collaborative research (STS 3504 Collaborative Research in Science, Technology, and Society). The course combines research methods with hands-on experience in collaborative work on a social problem involving science and/or technology. During alternate years, the collaborative methods course will be coupled with the STS Department’s Choices and Challenges Forum. This is a public forum on an area of science and technology that is of pressing public concern. Students in the STS Collaborative Methods course will participate in developing information materials for the forum, designing background sessions, and will interact with invited panelists in a closed workshop setting.

Furthermore, all students in the program will specialize in a focus area, where they will take 9 credit hours to acquire technical literacy and deeper knowledge of one area. The focus areas will initially consist of Energy and Environment, Medicine and Life Sciences, and Engineering and Innovation, with a fourth option consisting of a custom focus area that students design in consultation with their advisor.

The capstone, STS 4304, will provide an opportunity to pursue supervised individual research related to the student’s focus area, while gaining experience in presentation and critique in a seminar setting. Students in the STS program will compile a research portfolio based on their projects in the Collaborative Methods course and the STS Capstone.

Students will complete the program with either a Bachelor of Arts or a Bachelor of Science degree. The BA is appropriate for students seeking a broad liberal arts degree, requiring additional upper-level courses in perspectives on science and technology from the humanities, social science and arts. The Bachelor of Science allows students to combine the STS requirements with a more advanced program of study in a scientific or technological area that is linked to their STS focus area.

**Curriculum Summary**

I. **Pathways to General Education (45 credits)**

   Distributive Pathway:
   
   - Discourse (9 credits)
   - Quantitative and Computational Thinking (9 credits)
   - Reasoning in the Natural Sciences (6 credits)
   - Critique and Practice in Design and the Arts (6 credits)
   - Reasoning in the Social Sciences (6 credits)
Critical Thinking in the Humanities (6 credits)
Critical Analysis of Identity and Equity in the United States (3 credits)
Pathways requirements may also be fulfilled through a Pathways Minor or Alternative Pathway.

II. STS Degree Core Requirement (21 credit hours)
STS Core Sequence
STS 1504: Introduction to Science, Technology, and Society (3 cr)
STS 3504: The Practice of Collaborative Research in STS (3 cr)
STS 4304: Contemporary Issues in Science, Technology, and Society (3 cr)
Core area requirements
STS 2154: Humanities, Technology and the Life Sciences (3 cr)
STS 2254: Innovation in Context (3 cr)
STS 2454: Science, Technology, and the Environment (3 cr)
STS 2444: Global Science and Technology Policy (3 cr)

III. Focus Area Restricted Electives (9 credit hours)
Nine credit hours in one of the following focus areas

Energy and Environment (three of the following):
ENGL 3534: Literature and Ecology (3 cr)
GEOG/NR 1115-1116: Seeking Sustainability1 (3 cr)
GEOG 3104: Environmental Problems, Population, and Development (3 cr)
HIST 3144: American Environmental History (3 cr)
PHIL 2304: Global Ethics (3 cr)
STS 3334: Energy and Society (3 cr)
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives (3 cr)
UAP 3354: Introduction to Environmental Policy and Planning (3 cr)

Engineering and Innovation (three of the following):
ENGE 2004: Citizen Engineering (3 cr)
ENGL 3844: Writing and Digital Media (3 cr)
HIST/SOC/STS 2604: Introduction to Data in Social Context (3 cr)
HIST/STS 2715, 2716: History of Technology (3 cr)
HIST 3114: United States Business History (3 cr)
MGT 3064: Cornerstones of Entrepreneurship and Innovation (3 cr)
STS/HIST 2054: Engineering Cultures (3 cr)

Life Sciences and Biomedicine (three of the following):
ENGL 3154: Literature, Medicine, and Culture (3 cr)
ENGL/STS 4314: Narrative Medicine (3 cr)
HIST 3624: Health and Illness in African History (3 cr)
HIST 3714: War and Medicine (3 cr)
HIST 3724: History of Disease, Medicine, and Health (3 cr)
HIST/STS 3734: History of Modern Biology (3 cr)
PHIL 3324: Biomedical Ethics (3 cr)

---

1 Only one course of the two-course sequence can be counted toward the STS focus area requirement.
PHIL 4604: Philosophy of Biology (3 cr)
SOC 3714: Sociology of Aging (3 cr)
SOC 4704 Medical Sociology (3 cr)
STS 3284: Technology and Disability (3 cr)
STS 3314: Medical Dilemmas and Human Experience (3 cr)
WGS/SOC/STS 3324: Perspectives on the Biology of Women (3 cr)
WGS/SOC/STS 4334: Sexual Medicine (3 cr)
WGS/STS 4704: Gender and Science (3 cr)

Custom Focus Area, designed with academic advisor (9 credits)

IV. For the Bachelor of Arts Degree: Advanced perspectives from the humanities and social sciences (6 credit hours)
Two additional courses at the 3000-level or higher, and approved by the academic advisor, related to science and technology from the perspective of humanities, social sciences, or the arts. For example, a student in the Engineering and Innovation focus area might fulfill this requirement with CINE 3224 Documentary Cinema Production and CINE 3184 Cinema Production Topics.

For the Bachelor of Science Degree: Specialized study in science and technology (6 credits)
Two additional courses at the 3000-level or higher in a technical area outside of social sciences and humanities related to the student’s focus area, and approved by the academic advisor. These must be courses with subject matter in science, mathematics, technology, or engineering. For example, a student in the Energy and Environment focus area pursuing the Bachelor of Science Degree might fulfill this requirement with BIOL 3114: Field and Laboratory Ecology (3), and BIOL 4004: Freshwater Ecology (3).

V. Free electives (39 credits)

Relevance to university mission and strategic planning
The BA/BS in Science, Technology, and Society is designed to harmonize with the university’s goals of developing “VT-shaped individuals.” First, it will provide disciplinary knowledge in the form of STS as a comprehensive way of thinking about the relationship of science and technology to society. This involves a set of specialized concepts and frameworks developed expressly for studying and understanding technical fields as thoroughly intertwined with social, cultural, and political realities.

Second, the curriculum will provide cross-cutting skills such as research design, managing collaborative projects, policy development and evaluation, writing and speaking skills for public engagement. Focus areas and specialization requirements will provide students with literacy in a specific problem area. Students in the Bachelor of Science option will undertake further study in a technical area.

Third, the program will provide guided experiential learning in the 3000-level core course on the practice of collaborative research and in the STS capstone. Students will be encouraged to pursue internships related to their STS studies. The STS Department has piloted a summer course for students pursuing internships in the National Capital Region.
Finally, the program will promote informal communal learning through co-curricular activities using existing departmental resources: undergraduate research symposia, guest speakers, presentations of student work in the ST Global student meeting held annually in the National Capital Region.

**Destination areas:** Students in the STS program will be able to combine their degree requirements in STS with a major in any of the planned Destination Areas. The STS program will complement work in a Destination Area by providing social science and humanities perspectives on the area’s subject matter. The major will also include courses that fit within specific destination areas, allowing students to count STS courses toward a Destination Area major. For instance, our courses in Engineering and Innovation might count toward a major in Intelligent Infrastructures and Human-Centered Design.

Other planned features of the program that relate directly to the VT mission and strategic plan:
- With our department’s presence in the National Capitol Region, we will initiate undergraduate activities there, offering summer courses that will provide an opportunity to combine internships with classroom study and research.
- The program combines transdisciplinary competence with specialization. It pursues general learning outcomes, with regard to interdisciplinary and transdisciplinary perspectives and methods of STS, and specialized learning outcomes, requiring the application of those tools in the process of developing deep knowledge of a particular focus area.

**Justification**

The establishment of a Bachelor of Arts/Bachelor of Science in Science, Technology, and Society at Virginia Tech will answer two related and growing demands. On one hand, Virginia Tech attracts many students with strong interests in science and technology, but who are not interested in majoring in engineering or in specializing solely in a scientific field. They are drawn to science and technology through personal interest and an awareness of the pervasive influence of science and technology in modern life. They will be seeking the range of skills typically acquired in a liberal arts degree, such as writing, public speaking, research, but coupled with technological literacy and a focus on specific areas of science and technology.

On the other hand, employers and graduate programs are increasingly placing a high value on college graduates who are neither engineers nor science majors, but who are effective problem solvers due to their understanding of the ways that science and technology interact with social life, culture, and politics.

Science, Technology, and Society (STS) bridges these two growing demands. It provides students with an understanding of the ways that science and technology are embedded in social life, as well as practical conceptual frameworks and methods for pursuing interdisciplinary solutions to contemporary problems. Combined with literacy in one or more areas of science and technology, analytic and writing abilities, and experience in collaborative work, these students will acquire a highly valued and marketable set of competencies.

An undergraduate STS degree is excellent preparation for any career that calls for a liberal arts degree, but with special relevance to science and technology-rich fields, such as science communication, technology marketing and management, environmental organizations, research
administration, science policy, military careers, and museum work. And it prepares students for graduate and professional study in areas such as Business, Law, Health Professions, Information Science, and Environmental Policy.

**Student demand**

Science, Technology, and Society is a growing field, nationally and internationally. The College Board lists STS undergraduate programs at 68 higher education institutions in the U.S., including public land-grant schools such as Penn State, University of California at Davis, and North Carolina State University. Ohio State University has recently added a concentration in STS within its Comparative Studies major. In our region, at North Carolina State University, the STS undergraduate degree program has over 110 students currently enrolled. There are no undergraduate degree programs in Science, Technology, and Society in public higher education institutions in Virginia.

The department’s undergraduate courses have experienced consistently high enrollment. The introductory course in STS has filled to its capacity of 120 students for the past two years. Other courses that will be included in the degree program indicate a strong student interest in the subject matter.

We recently surveyed students enrolled in STS 1504, Introduction to Science, Technology, and Society. Out of 67 responses, 30, or 45% indicated that they were “extremely interested” or “somewhat interested” in the degree program in STS. Of the 25 students who had not yet declared a major 12, or 48% indicated that they were either “extremely interested” or “somewhat interested” in the STS degree program.

**Market demand**

The STS degree program combines instruction and real-world application of communication skills, both written and oral; powerful conceptual frameworks for understanding the social and cultural dimensions of science and technology; and focused knowledge of a particular problem domain. Graduates of the program will be well prepared for positions that require writing, speaking, research, and analytic skills in science- and technology-rich settings.

A growing body of knowledge suggests that pay is not only growing for graduates of liberal arts programs, but that their long-term earning potential is comparable to, or outpacing that of graduates of STEM programs. The *Wall Street Journal* writes, “When asked to define the résumé traits that matter most, however, the NACE-surveyed employers rated technical skills 10th. Four of the top five traits were hallmarks of a traditional liberal-arts education: teamwork, clear writing, problem-solving aptitude and strong oral communications. Mindful of those longer-term needs, some employers end up hiring humanities and social-sciences graduates, even if such majors aren’t explicitly singled out when recruiting.”

The *World Economic Forum* report, ‘The Future of Jobs,’ confirms the importance of these skills. The top five desired traits for employees in 2020 include complex problem solving, critical thinking, creativity, people management, and coordinating with others – all trademarks of degree programs emerging from the liberal arts.

---

Yet these traits must be tailored for a rapidly changing and evolving world marketplace. The same report from which the above skills are derived notes that technological developments are driving commerce, development, and production in disruptive ways. “Developments in previously disjointed fields such as artificial intelligence and machine learning, robotics, nanotechnology, 3D printing and genetics and biotechnology are all building on and amplifying one another. Smart systems—homes, factories, farms, grids or entire cities—will help tackle problems ranging from supply chain management to climate change. Concurrent to this technological revolution are a set of broader socioeconomic, geopolitical and demographic developments.” Thus, not only do graduates need to build desirable traits, they must be familiar with new and emerging scientific and technological environments.

**Required resources**

The program can be implemented with existing departmental resources. As enrollment reaches our five-year target, it may require a half-time academic advisor and an additional graduate teaching assistantship. A future faculty position in STS approaches to information technology would allow us to add an additional focus area, but is not necessary for initiating the program.

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>ESTIMATED COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>$0</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>$15000/yr., starting in year 5</td>
</tr>
<tr>
<td>Graduate Teaching/Graduate Research Assistant</td>
<td>$32000/yr., starting in year 5 (includes tuition and stipend)</td>
</tr>
<tr>
<td>Space</td>
<td>$0</td>
</tr>
<tr>
<td>Library</td>
<td>$0</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0</td>
</tr>
<tr>
<td>Other</td>
<td>$1000 (printing, web design, publicity, information events)</td>
</tr>
</tbody>
</table>
I. STS Degree Core Requirements (21 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS 1504 Introduction to Science, Technology, and Society</td>
<td>3 cr</td>
</tr>
<tr>
<td>STS 3504 The Practice of Collaborative Research for Science, Technology, and Society (Pre: 1504, and one of 2154 or 2444 of 2454 or 2254)</td>
<td>3 cr</td>
</tr>
<tr>
<td>STS 4304 Contemporary Issues in Science, Technology, and Society (Pre: 1504)</td>
<td>3 cr</td>
</tr>
<tr>
<td>STS 2154 Humanities, Technology, and the Life Sciences</td>
<td>3 cr</td>
</tr>
<tr>
<td>STS 2254 Innovation in Context</td>
<td>3 cr</td>
</tr>
<tr>
<td>STS 2444 Global Science and Technology Policy</td>
<td>3 cr</td>
</tr>
<tr>
<td>STS 2454 Science, Technology, and the Environment</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

II. STS Focus Area Restricted Electives (9 credit hours)

Complete 9 hours of courses in one of the following areas

1. Engineering and Innovation
   - ENGE 2004: Citizen Engineering                                    3 cr
   - ENGL 3844: Writing and Digital Media (Pre: ENGL 1106 or 1204H or COMM 1016)  3 cr
   - HIST/SOC/STS 2604: Introduction to Data in Social Context        3 cr
   - HIST/STS 2715, 2716: History of Technology                       3 cr
   - HIST 3114: United States Business History                        3 cr
   - MGT 3064: Cornerstones of Entrepreneurship and Innovation        3 cr
   - STS/HIST 2054: Engineering Cultures                              3 cr

2. Energy and Environment
   - ENGL 3534: Literature and Ecology (Pre: ENGL 1106 or 1204H or COMM 1016)  3 cr
   - GEOG/NR 1115-1116: Seeking Sustainability¹ (Pre: 1115 for 1116)       3 cr

¹ Only one course of the two-course sequence can be counted toward the STS focus area requirement.
GEOG 3104: Environmental Problems, Population, and Development
HIST 3144: American Environmental History
PHIL 2304: Global Ethics
STS 3334: Energy and Society
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives
UAP 3354: Introduction to Environmental Policy and Planning

3. Life Sciences and Biomedicine
ENGL 3154: Literature, Medicine, and Culture (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr ______________
ENGL/STS 4314: Narrative Medicine (Pre: ENGL 3154 or 3324) 3 cr ______________
HIST 3624: Health and Illness in African History 3 cr ______________
HIST 3714: War and Medicine
HIST 3724: History of Disease, Medicine, and Health
HIST/STS 3734: History of Modern Biology
PHIL 3324: Biomedical Ethics
PHIL 4604: Philosophy of Biology
SOC 3714: Sociology of Aging (Pre: 1004)
SOC 4704 Medical Sociology (Pre: 1004)
STS 3284: Technology and Disability
STS 3314: Medical Dilemmas and Human Experience
WGS/SOC/STS 3324: Perspectives on the Biology of Women (Pre: WGS 1824)
WGS/SOC/STS 4334 Sexual Medicine (Pre: WGS 1824)
WGS/STS 4704: Gender and Science (Pre: WGS 2244 or STS 1504) 3 cr ______________

4. Custom Focus Area
Nine credit hours in a selected specialty of Science, Technology, and Society, approved by academic advisor 3 cr ______________
3 cr ______________
3 cr ______________

III. Advanced Perspectives in the Humanities and Social Sciences (6 credit hours)
Two additional courses at the 3000-level or higher, and approved by the academic advisor, related to science and technology from the perspective of humanities, social sciences, or the arts. Please refer to the Prerequisites section, below. 3 cr ______________
IV. Pathways to General Education (45 credit hours)
STS courses outside of the 21-credit core may be counted toward the Pathways requirements.

<table>
<thead>
<tr>
<th>Pathways to General Education Credits</th>
<th>3 cr</th>
<th>3 cr</th>
<th>3 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse (9 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative and Computational Thinking (9 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasoning in the Natural Sciences (6 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critique and Practice in Design and the Arts (6 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasoning in the Social Sciences (6 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Thinking in the Humanities (6 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis of Identity and Equity in the United States (3 credit hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pathways to General Education Credits can also be fulfilled through a Pathways Minor or Alternative Pathway

V. Free electives (39 credit hours)

<table>
<thead>
<tr>
<th>Free electives</th>
<th>3 cr</th>
<th>3 cr</th>
<th>3 cr</th>
<th>3 cr</th>
<th>3 cr</th>
<th>3 cr</th>
<th>3 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VI. Foreign Language
Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six semester hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement
do not count toward the hours required for graduation. Please consult the Undergraduate Catalog for details.

**Prerequisites**

Some courses listed on this checksheet have prerequisites, please consult the University Course Catalog, or check with your advisor.

**Graduation Requirements**

- Minimum of 120 credit hours for the degree
- In-major GPA (courses in sections I, II, III, above) must be 2.0 or higher.
- Minimum overall GPA of 2.0.

**Satisfactory Progress Policy**

In addition to the satisfactory progress toward a degree policy required by the University, satisfactory progress toward a B.A. in STS requires that upon having attempted 72 semester hours (including transfer, AP, advanced standing, and credit by exam) an STS student must have:

- Completed at least 9 credits of the STS core requirements (Section I, above)
- At least a 2.0 overall GPA
- At least a 2.0 in-major GPA.

In-major courses include all STS core courses (Section I), Focus Area requirements (II), and Advanced Perspectives in the Humanities and Social Sciences requirements (III).
approval for English courses on STS check sheet

Bernice Hausman <bhausman@vt.edu>  
To: Daniel Breslau <dbreslau@vt.edu>, Virginia C Fowler <vfowler@vt.edu>  

Mon, Jan 30, 2017 at 11:17 AM

Dear Daniel:

The Department of English endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the ENGL courses listed below as electives. The English Department will be able to support the additional student enrollment up to existing capacity, and welcomes the opportunity to teach students in the STS undergraduate major:

ENGL 3154 Literature, Medicine, and Culture  
ENGL 4314: Narrative Medicine  
ENGL 3844: Writing and Digital Media  
ENGL 3534 Literature and Ecology  
ENGL 4874: Issues in Professional and Public Discourse

Sincerely,

BH

Bernice L. Hausman

Chair, Department of English, Virginia Tech  
Edward S. Diggs Professor in the Humanities  
Professor, Virginia Tech Carilion School of Medicine

540-231-8466  
bhausman@vt.edu
ENGE 2004 Citizen Engineering
2 messages

Donna Riley <dmriley@vt.edu>
To: Daniel Breslau <dbreslau@vt.edu>

The Department of Engineering Education endorses the proposed undergraduate degree program in Science, Technology, and Society, and supports the inclusion of ENGE 2004 Citizen Engineering. The Department welcomes the enrollment of additional students in these courses, and we acknowledge no additional resources are needed.

Thanks,

Donna

------------------------------------
Donna Riley, Ph.D.
Professor and Interim Head
Department of Engineering Education
Affiliate Faculty, Science, Technology, & Society
Affiliate Faculty, Women's & Gender Studies
Virginia Polytechnic Institute and State University
Gender pronouns: she/her, they/them

349 Goodwin Hall
635 Prices Fork Rd.
Blacksburg, VA, USA 24061
dmriley@vt.edu

Daniel Breslau <dbreslau@vt.edu>
To: me@onenote.com

[Quoted text hidden]

--

Daniel Breslau
Associate Professor and Chair
Department of Science and Technology in Society
Virginia Tech
133 Lane Hall
Blacksburg, VA 24061-0247
(540) 231-8472 (work)
(540) 449-9791 (mobile)
approval for listing HIST courses in new STS major

Mark Barrow <mabarro2@vt.edu>  
To: Daniel Breslau <dbreslau@vt.edu>  
Cc: Heather Gumbert <hgumbert@vt.edu>

Wed, Feb 1, 2017 at 7:35 PM

Dear Daniel,

By this note I am granting permission for the following HIST course to be added to the new STS major:

HIST 3144 American Environmental History  
HIST 3724 Disease, Medicine, and Health  
HIST 3624 Health and Illness in African History  
HIST 3714 War and Medicine  
HIST 3734 History of Modern Biology  
HIST 3114 History of Capitalism  
HIST 3715, 3716: History of Technology (changing to 2715-16 by fall 2017)  
HIST 2604 Introduction to Data in Social Context (when approved)

We plan to offer these courses regularly, and adding them to your checksheet will require no additional resources.

Please let me know if you need anything else.

Best,
Mark Barrow

Mark V. Barrow, Jr.  
Professor and Chair  
Department of History (0117)  
Virginia Tech  
Blacksburg, VA 24060  
540-231-4099
The Department of Management endorses the proposed undergraduate degree program in Science, Technology, and Society, and supports the inclusion of the MGT 3064 Cornerstones of Entrepreneurship and Innovation. The department welcomes the enrollment of additional students in this course, and we acknowledge no additional resources are needed.

Best regards.

Devi

Devi R. Gnyawali, Ph.D.

R. B. Pamplin Professor and Department Head

Department of Management (mail code 0233), 2007 Pamplin Hall

880 West Campus Drive, Blacksburg, VA 24061

Email: devi@vt.edu

Phone: 540-231-6353

Associate Editor, Journal of Management

http://www.management.pamplin.vt.edu/devi-r-gnyawali/
February 3, 2017

Dear Curriculum Committee:

The Department of Sociology endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the SOC courses listed below as electives. The department welcomes the enrollment of additional students in these courses, and we acknowledge no additional resources are needed.

SOC 3714 Sociology of Aging
SOC 4704 Medical Sociology

Sincerely,

John Ryan
Professor and Chair
February 1, 2017

RE: Letter of Support for UAP Courses for New Undergraduate Degree in Science, Technology, and Society

The Urban Affairs and Planning Program (UAP) endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the UAP courses listed below as electives. We welcome the enrollment of additional students in this course, and we expect that no additional resources will be needed.

- UAP 3344 (PSCI 3344): Global Environmental Issues: Interdisciplinary Perspectives
- UAP 3354: Introduction to Environmental and Policy Planning
- UAP 4214: WOMEN, ENVIRONMENT AND DEVELOPMENT IN A GLOBAL PERSPECTIVE
- UAP 4264: ENVIRONMENTAL ETHICS AND POLICY
- UAP 4394: COMMUNITY RENEWABLE ENERGY SYSTEMS

Please contact me if you have any questions or comments.

Sincerely,

Thomas W. Sanchez, PhD
Chair & Professor, Urban Affairs and Planning
tom.sanchez@vt.edu
Monday, February 13, 2017

The Program of Women's and Gender Studies (WGS) in the Department of Sociology endorses the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the WGS courses listed below as electives. The Program welcomes the enrollment of additional students in this course, and we acknowledge no additional resources are needed:

WGS 4704 Gender and Science
WGS 3324 Perspectives on the Biology of Women
WGS 4334 Sexual Medicine

We are very excited to have these doubly listed options for STS and WGS.

My very best,

Sharon P. Johnson
Director of WGS
Memorandum

TO: CLAHS Undergraduate Curriculum Committee
FROM: Douglas Lind
Head, Department of Philosophy
RE: Proposed undergraduate degree program in STS
DATE: March 21, 2017

The Department of Philosophy endorses the proposed undergraduate degree program in Science, Technology, and Society (STS) and supports the inclusion of the Philosophy courses listed below as electives. The Philosophy Department welcomes the enrollment of additional students in these courses, and we acknowledge no additional resources are needed.

PHIL 2304: Global Ethics
PHIL 3324: Biomedical Ethics
PHIL 4604: Philosophy of Biology

Douglas Lind
April 19, 2017

Daniel Breslau
Science and Technology in Society, 0247
Virginia Tech

Dear Dr. Breslau,

The Department of Geography is pleased to endorse the undergraduate degree program in Science, Technology, and Society and supports the inclusion of the GEOG courses listed below as electives. The Department welcomes the enrollment of additional students in these courses, and we acknowledge that no additional resources are needed. Specifically, we grant permission to include the following Geography courses as electives:

GEOG 1115-1116 (NR 1115-1116): Seeking Sustainability
GEOG 3104 Environmental Problems, Population, & Development

Sincerely,

Korine Kolivras
Associate Professor and Co-Chair
CAPFA Minutes
Commission on Administrative and Professional Faculty Affairs
November 8, 2017 – 1:30pm – 2400 North End Center/WebEx

Present: Janice Austin, Heather Slosman, Monika Lawless, Mary Norris, Cayce Myers, Prateek Mishra, David Clubb, Sue Teel, John Benner, Jeremy Daubert, Amy Hogan, Allen Campbell, Mallory Foutch, Alan Grant, Vicky Ratcliffe, Lonnie Johnson (WebEx), Maria Balota (WebEx).

Absent: Mary Christian, Karisa Moore, Margaret Ratcliffe (with notice), Laura Neff-Henderson

Guests: None

Ms. Austin called the meeting to order at 1:32pm. A quorum was present.

Approval of Minute from October 11, 2017

Ms. Austin reported all noted corrections/typos were corrected, the minutes were approved electronically, and they have been forwarded to the University Council.

Old Business

Appointment of a Vice Chairperson: Monika Lawless had volunteered for the position at our last meeting. There were no other volunteers/nominations today. Allen Campbell made a motion to proceed with vote, Cayce Myers seconded the motion, all Commission members in attendance voted unanimously for Monika Lawless.

Assignment to Working Groups: Ms. Austin suggested that members choose one of the 3 working groups previously decided upon, then those smaller groups will meet after our regular CAPFA meetings and/or outside of that time to focus on their area. The three groups are as follows:

1) CAPFA Awareness: Monika Lawless, Margaret Ratcliffe
2) Networking Event:
3) Outreach Project: Karisa Moore, Heather Slosman, Vicky Ratcliffe

Other commission members will consider the options, and Ms. Austin will send more information via email to those that wish.

New Business

Volunteers for Grievance Panel: Ms. Austin reported that she has been told the Commission will be receiving a grievance in the next 2 weeks. The first step is to create a panel of 3 (including Ms. Austin) to
review the documentation and determine if it is indeed a grievable offense as defined by the faculty handbook. Volunteers: Cayce Myers, Vicky Ratcliffe, Monika Lawless, Mallory Fousch, and Heather Slosman.

Ms. Austin will be in touch with the volunteers when she receives more information. If any of the volunteers are in the same department as the person filing the grievance they will not be included on the panel (thus the need for more than 2 volunteers).

**Commission Representative Reports:**

Extension (John Benner, Jeremy Daubert, Maria Balota) – Nothing to report.

SGA (Pratiek Mishra) – Mr. Mishra reported that a new advisor (“Scott”) has been assigned and will be arriving next week.

Graduate Student Assembly (Mary Norris) – Nothing to report.

Staff Senate (Sue Teel) – Nothing to report.

Commission on Undergraduate…. (David Clubb) – There are 2 new degree programs in their first reading. 1) BA in Science, Technology, and Society 2) BA in Philosophy, Politics and Economics. He also reported on a resolution put forth that the Foundational Discourse Programs MUST be in English. The Commission voted against this recommendation.

Commission on Student Affairs (Mallory Foutch) – Ms. Foutch reported a focus in this Commission on the impact of the student experience due to the overcrowding in housing and dining facilities. Students are being encouraged to voice concerns and possible solutions. Ms. Foutch is also encouraging students to provide feedback to her on how we as AP faculty can support these student concerns.

Amy Hogan – Discussed the newest climate survey that is currently being created, and requested if members had particular items they would like to include in the survey to let her know via email. She specifically noted a focus of inclusion, diversity, leadership and professional development in the survey. Survey will be put out in the spring.

**Other New Business:**

Ms. Austin asked Ms. Hogan about the impact of recent Administration Changes. Ms. Hogan reported there are no anticipated changes, all initiatives are continuing and there is a focus on communication, engagement and collaboration. She reported that the search will begin the next academic year, with an anticipated start date of the new person in summer 2019.

Our next meeting will be December 13, 2017

The meeting was adjourned at 1:57pm
Commission on Faculty Affairs  
Minutes  
November 17, 2017  
10:30 a.m.-12:00 p.m.  
330E Burruss Hall

**In Attendance:** J. Finney (acting Chair), G. Amacher, R. Blieszner, L. Geyer, V. Groover, B. Hicok, M. McGrath, T. Schenk, R. Speer, J. Spotila, P. Young

**Absent:** L. Brogdon, S-Y Chien, J. Ferris, R. Willis

**Guests:** T. Bluestein

**Upcoming Meetings:** Dec. 1 (130 Burruss), Dec. 15 (330E Burruss)

1. **Welcome and Approval of Agenda**  
   J. Finney  
   Meeting called to order at 10:34 a.m.  
   The agenda was approved unanimously.

2. **Approval of November 3, 2017 Minutes**  
   J. Finney  
   The minutes were approved unanimously.

3. **Employee Benefits Committee Update**  
   G. Amacher  
   G. Amacher gave an update on the Employee Benefits Committee. The committee meets on the final Wednesday of each month. Currently, the primary objective of the committee is evaluating retirement benefits for tenure track faculty. Human Resources is collecting data about tenure track faculty retirement benefits at peer institutions. Additionally, the committee has expressed an interest in childcare options available in the Blacksburg area, and this will be discussed at future meetings, including inviting J. Finney, Vice Provost for Faculty Affairs to a meeting to discuss childcare as well as parental leave.

   The Commission on Faculty Affairs (CFA) also discussed the importance of investigating what efforts are being made by VT Government Relations and the Graduate Student Assembly in regards to the proposed tax bill currently being discussed in the US House of Representatives. Commission members expressed concern over the changes the tax bill could have, especially in relation to the taxation of graduate student tuition subsidy. Finally, G. Amacher asked the CFA to bring any issues for the Employee Benefits Committee forward for input.

4. **SGA Proposal-Student, Staff, & Faculty Work Group on Diversity and Inclusion**  
   R. Willis  
   R. Willis was not present to make this presentation. This item will be discussed at a future CFA meeting.
5. **Promotion and Tenure (P&T) Work Group Update**

R. Hicok presented about the P&T Workgroup meeting that occurred from 9-10 on November 17. The Workgroup expressed interest in requesting that an email sent by Interim Provost C. Clarke to college deans also be sent to department heads. This email outlined some of the interim measures for P&T. The commission also discussed the nature of review and changes that the workgroup, in conjunction with the Faculty Senate and the CFA, will bring forward. Discussion centered on the nature and method of these changes and will be discussed further at future meetings. The workgroup will be creating an agenda of issues to consider and invites the commission to contribute to the agenda.

6. **Other Business**

L. Geyer brought up a concern about the ability of Faculty Senate being able to communicate news from the Senate to both the university at large and faculty members only. Various possibilities were discussed, including adding a report by the President of the Faculty Senate to VT News releases, as well as the possibility of having a listserv for faculty members only. University Relations maintains listservs for highly restricted uses and the Faculty Senate will investigate methods to achieve informing the VT community about Faculty Senate happenings, as well as exploring how to create a method to communicate directly with faculty members.

7. **Adjourn**

The meeting was adjourned at 11:17 a.m.
MINUTES

Commission on Graduate Studies & Policies
November 15, 2017
3:30 – 5:00 p.m.
Graduate School Conference Room

Present: Kevin Edgar (Chair), Alan Abrahams, Lujean Baab, Adwoa Baah-Dwomoh, Rajesh Bagchi, Nancy Bodenhorn, Lesa Hanlin, Alex Hyler, Peizhen Lu, Xin Luo, Hannah Parks, Annie Pearce, Robert Sumichrast, and Martina Svyantek.

Absent with notification: Jacob Barney, Karen DePauw (ex officio), Eric Hill, Rachel Holloway, Erin Lavender-Stott, Brett Netto, Sally Paulson, Tyler Walters (ex officio), Ying Zhou, and Zhiwu Xie.

Absent without notification: Sudip Bhattacharjee and Julie Billingsley.

Visitors and invited guests: Janice Austin and Bill Huckle.

Call to Order
The meeting was called to order by Dr. Edgar at 3:30 p.m.

Approval of the Agenda
The agenda was approved as presented.

Approval of the Minutes
The minutes of November 1, 2017 were approved as amended.

Committee Reports

Graduate Curriculum Committee
Dr. Bagchi presented the minutes of November 9th, 2017; they were accepted as presented.

Graduate Student Appeals Committee
The committee reported a case is currently under review.

Degree Requirements, Standards, Criteria, and Academic Progress (DRSCAP) Committee
Dr. Bodenhorn reported there was no meeting last week. She acknowledged CEO’s comments regarding the inclusion and diversity education resolution and the committee will review the comments at the next DRSCAP meeting.

Constituency Updates
Graduate Student Assembly

Ms. Hyler reported the GSA will meet tomorrow. The GSA will consider possible revisions about concerns in the Master Plan. The House version of the bill proposes taxation of tuition waivers. The GSA has issued a call to action and has established a web presence with data on the impact of this proposed legislation. The parking master plan is under consideration and improved parking availability may be forthcoming for graduate students.

Graduate Honor System

There was no report.

University Library Committee

Ms. McMillan reported library staff are looking at graduate student data and library usage. Guidelines are being drafted and the geography department is being asked to review for comments. The committee has not met.

Faculty Senate

Dr. Abrahams reported the Faculty Senate approved a full-faculty pilot of the Faculty Soundboard survey, subject to approval by University Legal Counsel. Legal counsel has been asked to review the implications of the Faculty Soundboard in relation to Title IX, Clery Act, FOIA, and any other legal matters.

Student Government Association

Ms. Hyler presented on behalf of Ms. Billingsley that the SGA has passed legislation to form a working group or task force to review discrimination actions as related to university policy 1025. This is specific to the Commission on Faculty Ethics.

Board of Visitors

Mr. Netto reported the Board of Visitors met from November 4th-6th. On Saturday, the events started with a luncheon where the board members met with undergraduate and graduate students to listen to the student’s perspectives regarding Virginia Tech. Feedback from both the board members and graduate students was extremely positive. Later that evening, the board viewed the updated Master Plan in the Cube at the Moss Arts Center. The Board also passed the resolution to finalize the merger between Virginia Tech and the Carilion School of Medicine to create the ninth college at Virginia Tech. This will officially begin on July 1, 2018.

University Council and Commission Updates

Dr. Edgar reported the Center for International Research and Development was approved. There was an excellent presentation on security and safety by Chief Foust. Dr. Edgar encourages everyone to reach out and provide this education for their departments.
There were no other commission updates.

**Graduate School Update**

There was no report.

**Old Business**

There was no old business.

**New Business**

The iThenticate document has been revised to include publications as book chapters which would not be considered plagiarism. The other update notes that the tool standard is subjective and the tool will not be fail proof. The iThenticate document will be reviewed again at the next meeting.

The disrupting bullying website was reviewed. Dr. Bagchi will provide specific suggestions to Dr. Hanson. A question has surfaced on why all of the case studies are not listed on the website. There is a concern about why the case studies are not all listed. The task force will reconvene to discuss possible improvements to the website after everyone submits their concerns about the site. Concerns should be submitted to Ms. King for tracking and then will be submitted to Dr. Hanson for the next task force meeting.

**Announcements**

There were no announcements.

**Adjournment**

The meeting was adjourned at 4:21 p.m.

Respectfully Submitted,

/s/

Marilynn R. King
On behalf of Karen P. DePauw, Ph.D.
Vice President and Dean for Graduate Education
MINUTES
Commission on Graduate Studies & Policies
December 6, 2017
3:30 – 5:00 p.m.
Graduate School Conference Room

Present: Kevin Edgar (Chair), Lujean Baab, Adwoa Baah-Dwomoh, Rajesh Bagchi, Jacob Barney, Sudip Bhattacharjee, Julie Billingsley, Nancy Bodenhorn, Lesa Hanlin, Eric Hill, Alex Hyler, Erin Lavender-Stott, Peizhen Lu, Brett Netto, Hannah Parks, Sally Paulson, Annie Pearce, and Martina Svyantek.

Absent with notification: Karen DePauw (ex officio), Xin Luo, Robert Sumichrast, and Tyler Walters (ex officio).

Absent without notification: Alan Abrahams, Rachel Holloway, Zhiwu Xie, and Ying Zhou.

Visitors and invited guests: Janice Austin, Libbie Sonnier-Netto and Kenneth Wong.

Call to Order
The meeting was called to order by Dr. Edgar at 3:30 p.m.

Approval of the Agenda
The agenda was approved as presented.

Approval of the Minutes
The minutes of November 15, 2017 were approved as presented.

Committee Reports

Graduate Curriculum Committee
Dr. Bagchi reported on committee updates as reflected in the corrected minutes of October 26, 2017. The minutes were accepted by the commissioners.

Graduate Student Appeals Committee
Dr. Pearce reported one remaining case will be considered this semester.

Degree Requirements, Standards, Criteria, and Academic Progress (DRSCAP) Committee
Dr. Bodenhorn presented a proposed change in holistic admissions that would give departments the ability to request on a case-by-case basis regular admission and not provisional admission based on the
applicants’ experience, qualifications, and a GPA of 2.75-2.99. A motion was approved to effect this change in practice.

Dr. Bodenhorn has responded to Dr. Hu regarding the feedback from the CEOD executive committee about the inclusion and diversity education component. A meeting with DRSCAP and CEOD members has been proposed to further discussion about the proposed resolution.

Dr. Bodenhorn presented a draft letter to the Council of Graduate Schools regarding the current deadline of April 15th for students to accept assistantships. Three options have been suggested to improve the students’ and schools’ decision process. Additional discussion was held and DRSCAP will continue to work on options for consideration.

**Constituency Updates**

**Graduate Student Assembly**

Ms. Hyler reported the last fall GSA meeting will be tomorrow evening. The budget bill will continue to be discussed following the House and Senate versions moving to reconciliation.

**Graduate Honor System**

Ms. Lavender-Stott reported she has completed three panelist trainings for ten new panelists. There have been six cases moving through facilitation this fall. One special case is being appealed and one case from last year has been heard. She expects additional cases coming in during finals week. She will be meeting with other constituencies regarding the new plagiarism software implementation.

**University Library Committee**

There was no report.

**Faculty Senate**

Dr. Barney reported that the Faculty Senate discussed the proposed tax bill at last week’s meeting.

**Student Government Association**

Ms. Billingsley reported the reading days of December 13-15 will be held at Squires.

**Board of Visitors**

Mr. Netto reported the 2018-2019 BOV applications for student reps are open. Application can be made at [http://www.dsa.vt.edu/BOV/apply.php](http://www.dsa.vt.edu/BOV/apply.php).

**University Council and Commission Updates**

Dr. Edgar reported on resolution actions at University Council.
Ms. Hyler indicated there were no updates from the Commission on Student Affairs.

There were no other commission updates.

**Graduate School Update**

There was no report.

**Old Business**

The revised document for iThenticate was reviewed and there are no further updates.

Further discussion on academic bullying was postponed.

**New Business**

There is strong support for UC Resolution 2017-18A. There is concern the review process will bog down, however, thus far, the process has functioned successfully. A resolution cannot be delayed longer than four weeks.

**Announcements**

There were no announcements.

**Adjournment**

The meeting was adjourned at 4:15 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
November 16, 2017; 3:30-4:30 p.m.
Gateway Center; 902 Prices Fork Road; Suite 120

Attendance: Bonnie Alberts, Jan Helge Bøhn, Dave Close, Joshua Earle (for Samantha Fried), Shelley Martin, Karen Munden (via phone), Gerhardt Schurig, Heinrich Schnoedt, Kang Xia

Absent: Cyril Clarke, Andrea Brunais, Jennifer Carter, Svetlana Filiatreau, Samantha Fried, Guru Ghosh, John Jessen, Ed Jones, Roberto Leon, Ian Leuschner, Djordje Minic, Brett Shadle, Susan Short

1. Welcome and Introductions
Jan Helge Bøhn welcomed the group; self-introductions were made. Kimberly Rhodes indicated that University Governance was looking for a new SGA representative; John Jessen is unable to attend due to class conflicts. Cyril Clarke will no longer be on the commission due to Interim Provost duties, but Greg Daniel, Interim Dean for the College of Veterinary Medicine will be joining us for future meetings as the representative for the Deans to finish out Cyril’s appointment.

2. Agenda Approval
Jan Helge made the call for motion to approve the agenda; all were in favor and the agenda was approved with minor change.

3. Call for Announcements
The call for announcements was made; no announcements were made.

4. Announcement of Approval of Minutes, October 19, 2017
The minutes from the October 19, 2017 meeting were sent out electronically for updates; were approved electronically; and have been sent to University Council to be posted to the University Governance website upon approval by University Council. Minutes can be found at: http://www.governance.vt.edu/.

5. Chairman’s Report
Jan Helge gave an update on the University Council meeting from November 13, 2017. The update included the OIRED to CIRED resolution that went for the second reading and was passed. New business included the Commission on Undergraduate Studies and Policies resolution to approve a new major in Philosophy, Politics, and Economics, in Bachelor of Arts in Philosophy.

Svetlana Filiatreau sent information electronically with regard to the Subcommittee on Global Alumni Engagement; and asked that the commission review and provide the charge for the committee (see attached).

6. Alumni Awards for Outreach Excellence Update
Kim gave an update that the announcement for the Alumni Awards for Outreach Excellence had been sent out and ran in the E-Daily News for almost a week. She indicated a memo was sent out to Deans and Department Heads regarding the call for applications and distribution among their departments. The information about the awards and criteria is currently out on the webpage and Kim would send the link out to the members to get the word out (https://www.outreach.vt.edu/VP/AwardsAndRecognition.html).
7. **Reports**  
   a. **Virginia Cooperative Extension (VCE)**  
      Karen Munden spoke about the VCE process of re-structuring by using an interdisciplinary approach. There will be two (2) Associate Directors; one for the agriculture community and one for youth and family; there was an application process and more information to come. David Close also added the application process ended yesterday, the State Leadership team is an internal search, and there was funding to provide a salary stipend. Karen added that the appointments were three (3) year appointments, which would give more agents and opportunity to be in these leadership roles.

   b. **University Committee on International Affairs (UCIA) Meeting-No Report This Time**  
      There was no UCIA report at this time; however, minutes may be found at: [http://www.outreach.vt.edu/VP/CommissionsAndCommittees/ucia/uciaminutes.html](http://www.outreach.vt.edu/VP/CommissionsAndCommittees/ucia/uciaminutes.html).

8. **Commission Board Member Comments**  
   Jan Helge made the call for any comments; there were no comments made.

   A motion to adjourn was made, seconded, all were in favor; adjourned at 3:44 p.m.

   Respectfully submitted,

   Kimberly Rhodes  
   Recording Secretary

**TENTATIVE MEETING DATES FOR 2017-2018**  
*(All meetings will be from 3:30-4:30 p.m. and will take place at the Gateway Center-902 Prices Fork)*

- December 14, 2017
- NO JANUARY MEETING
- February 15, 2018
- March 15, 2018
- April 19, 2018
- May 10, 2018
Re: COIA Sub-Committee on Global Alumni Engagement

Per consultation with the sub-committee members, the following items are being suggested for COIA's consideration to be included in the sub-committee's charge.

1. Defining the terms "global" alumni and "international" alumni; we may have different definitions for different contexts. In one context (and perhaps the primary context), I believe "international alumni" (more so than the term "global alumni") may be defined as students who were considered international students (in a nonimmigrant visa classification) when they were enrolled at VT. In another context, “global alumni” (more so than “international alumni”) may refer to any alumni (domestic or international) who are now living abroad.

2. Defining the WHY for engaging with our global/ international alumni: the vision aligned with our institutional DNA and our aspiration for being a global land grant university, so that our engagement would help create regional ecosystems, through which university is positively communities and promoting socio-economic development.

3. Defining the WHAT for engaging with our global/ international alumni
   • What different forms of engagement would look like
     ○ for connecting alumni and current students;
     ○ For engaging alumni with life-long learning and connecting/ integrating it with their work-life systems
       • For alumni from faculty
       • For current students from alumni
       • For communities and regions alumni are living- from alumni, faculty, and students
     ○ For engaging in their communities (individually and through their places of work).

4. Defining the HOW: After we clarify and define what we mean by “global alumni” and/or “international alumni,” we need to:
   • figure out once and for all how to identify these students in the various university databases. If this requires changes in our business processes, we need to propose those changes. If it requires changes in our IT configurations and/or systems, we need to bring that forward to the appropriate individual(s).
   • Incorporate previously done work on identifying and engaging our alumni throughout the world.
     ○ In 2016, alumni office put forward a proposal regarding outreach and information gathering-finding ways and how to connect these.
     · The major issue is being better-able to track international (i.e. foreign national) alumni.
     ○ Document and Incorporate the process Hokies on Wall Street alumni group was organized. Mike Kender (Pamplin and VT Alumni Board) has created a process that might be replicated (at least in parts) to identify our expat alumni living abroad and our international alumni.
   • Create a process for capturing “institutional faculty memory” and working with VT faculty (current and retired) to reconnect with the international/global alumni.
   • Research and incorporate successful models and approaches used in other higher education institutions.
• Ultimately, we will need to think about the development of universal database codes we can use for this.
  ○ Check to see if anything has been created, since we switched to a new database.
Dear Kim, good morning:

Thank you for the agenda for today's COIA meeting. One item I would like to add is from the subcommittee on global alumni engagement. As COIA members are considering its formal charge, I would like to share the suggestions that came from the subcommittee members and earlier were articulated by some of the UCIA members.

Attached is a list compiled from the members' input. I was typing using my phone (this time, I am traveling without my computer), so the formatting may be off.

Kim and Jan Helge, good afternoon:

Thank you! An additional suggestion has come in from the sub-committee member. Would you please add the following to the earlier sent list of items for COIA's consideration of the sub-committee's charge? The recommendation is to "suggest that (1) COIA solicits input on the draft of the sub-committee charge from Matt Winston and that (2) COIA includes in its charge the recommendation for the COIA subcommittee and Alumni office to collaborate on this effort."

Most sincere regards,

Svetlana

Svetlana Filiatreau, Ph.D.
Director of International Programs
Virginia Tech, Pamplin College of Business
1070 Pamplin Hall (0209)
880 West Campus Drive
Blacksburg, VA 24061
www.pamplin.vt.edu

Phone: (540) 231-9603
Skype: eurasia.programs
WeChat: Svetlana_Filiatreau
Maximizer/ Connectedness/ Strategic/ Relator/ Ideation
COMMISSION ON OUTREACH AND INTERNATIONAL AFFAIRS
Minutes
December 14, 2017; 3:30-4:30 p.m.
Gateway Center; 902 Prices Fork Road; Suite 120

Attendance: Bonnie Alberts, Jan Helge Bøhn, Jennifer Carter (via phone), Dave Close, Carolyn Copenheaver, Greg Daniel, Svetlana Filiatreau, Samantha Fried, Ben Groves (for Ed Jones), Ian Leuschner, Roberto Leon, Shelley Martin, Karen Munden (via phone), Heinrich Schnoedt

Absent: Andrea Brunais, Guru Ghosh, John Jessen, Ed Jones, Djordje Minic, Gerhardt Schurig, Brett Shadle, Susan Short, Xia Kang

1. Welcome and Introductions
   Jan Helge Bøhn welcomed the group; self-introductions were made.

2. Agenda Approval
   Jan Helge made the call for motion to approve the agenda; all were in favor and the agenda was approved.

3. Call for Announcements
   Jan Helge made the call for announcements. Jennifer Carter announced that the Northern Virginia 4-H was voiced Best Summer Camp by NOVA magazine.

4. Announcement of Approval of Minutes, November 16, 2017
   Jan Helge announced that the minutes from the November 16, 2017 meeting have been approved electronically and forwarded to the University Council and to the University Governance website: http://www.governance.vt.edu/outreach-and-international-affairs.php

5. Chairman’s Report
   Jan Helge discussed that at the University Council meeting on December 4, 2017, the second reading and approval of the new major, Philosophy, Politics and Economics in Bachelor of Arts in Philosophy from the Commission on Undergraduate Studies and Policies; and new business included first reading of the resolution to amend the University Council By-Laws. Minutes for University Council http://www.governance.vt.edu/.

   Svetlana Filiatreau reported on the subcommittee on International Alumni Relations and Advancement. The membership includes Ian Leuschner, Don Back, Latonya Walker, Monika Gibson, Svetlana Filiatreau and a representative from Development. Through initial conversations, recommendations were made for the subcommittee to work with Alumni and Advancement and suggestions were to include a representative from Enrollment Management such as Juan Espinoza or Lisa Havens. As well, it was recommended to have a representative from the Pamplin College, College of Engineering Development divisions, as well as representatives from each college, whereas college representatives might be better connected. Discussion included compiling comments for review in order to come up with the formal charge for the subcommittee and this could be handled electronically ahead of the February meeting. Discussions need to include who international alumni are and what it means to different departments. Jennifer Carter shared that while involved in a certificate program one of the attendees ended up as an applicant to Virginia Tech.

   Conversations included identifying steps for a 2-year plan by April 19th meeting, a draft charge can be sent out for first reading electronically in January, second reading can occur at the February meeting and approval. A file repository can be set up on Google Drive.
6. **Alumni Awards for Outreach Excellence Update**
Kim Rhodes gave the group an update that there were three (3) contacts made to her office with regard to inquiries about the Alumni award for Outreach Excellence. One involved a Research component in which the inquirer was referred to the Alumni Award for Research and/or the Alumni Award for International Research. The second involved the confusion between the Alumni Award for Outreach Excellence and the College Award for Outreach Excellence, in which information was given to differentiate the two awards. The third inquiry involved a faculty member to be nominated for the Alumni Award for Outreach Excellence, but was retiring at the end of December. The explanation was that the nominee could be nominated for the College Award if the College has not already completed their process. A reminder of the awards will be submitted to the E-Daily News to run in January.

7. **Reports**
   a. **Virginia Cooperative Extension (VCE)**
      Ben Grove gave the summary of the events occurring for VCE. VCE has identified six (6) new program leaders; current faculty are to apply and become state leaders for three (3) years. The issue of the opioid epidemic is brought to the forefront of conversations and what can higher education do to convene the conversation. There will be a winter conference in February, which will be face-to-face (alternating years between virtual and face-to-face). Recently the annual stakeholder and administrative meeting was held.

   b. **University Committee on International Affairs (UCIA) Meeting**
      Ian Leuschner gave the UCIA meeting updates to include Larry Vaughn moving the Peace Corps Prep program; recruiting interested faculty; Louisa Havens presented at the November meeting; updates from the Global Education Office (GEO), International Support Services (ISS) audit; Cranwell’s changes to the International Street Fair and how food preparation is handled; the Language and Culture Institute (LCI) has visitors from Shandong University; Fulbrights arriving from Argentina and are processing an agreement with Saudi Arabia.

      Louisa Havens discussed enrollment management and the importance of international recruitment, which is not currently diverse. Discussion included the college needs assessments, and lack of usable data. Minutes may be found at: [http://www.outreach.vt.edu/VP/CommissionsAndCommittees/ucia/uciaminutes.html](http://www.outreach.vt.edu/VP/CommissionsAndCommittees/ucia/uciaminutes.html).

8. **Commission Board Member Comments**
Jan Helge made the call for any comments. Dave Close announced the search committee is wrapping up the search for a Director of Plant and Environment Science and a successful candidate should be announced at the beginning of the year.

A motion to adjourn was made, seconded, all were in favor; adjourned at 4:25 p.m.

Respectfully submitted,

Kimberly Rhodes
Recording Secretary

**TENTATIVE MEETING DATES FOR 2017-2018**
*(All meetings will be from 3:30-4:30 p.m. and will take place at the Gateway Center-902 Prices Fork)*

- NO JANUARY MEETING
- February 15, 2018
- March 15, 2018
- April 19, 2018
- May 10, 2018

COIA Meeting Minutes/kar
December 14, 2017
Minutes
COMMISSION ON RESEARCH
November 8, 2017
130 Burruss Conference Room
3:30pm – 5:00pm

Attendees: Jennifer Irish (Chair), Virginia Pannabecker (Vice-Chair), Theresa Mayer (Ex-Officio), Sally Morton, Alan Michaels, Sid Madhavan, Uri Kahanovitch, Robert Vogelaar, Andrew Neilson, Nancy Dudek, Kevin McGuire, Deborah Milly, Jon Greene (for Stefan Duma), Benjamin Corl, Rachel Rupnow, Tom Inzana (for Kurt Zimmerman), Dipankar Chakravanti, Ken Miller and Chris Tysor (Recorder).

Absent: Thomas Bell, Van Crowder, Myra Blanco, Saied Mostaghimi, Steve Nagle

Guests: Sanjay Raman, Dennis Grove

I. Approval of the Agenda – The agenda was approved with the correction of the order of guest speakers

II. Announcements
   a. Approval of the minutes from October 4th, 2017 – J. Irish reported the minutes had been approved electronically (lack of response indicated an approval of the minutes).

III. Unfinished Business
   a. University Library Committee update- V. Pannabecker updated the CoR on the last meeting of the University Library Committee, reporting they had gone through introductions, a presentation on library spaces and updates on university library services. There was no further progress to report.
   b. Faculty Senate update- B. Vogelaar reported on the Faculty Senate Resolution on Faculty Inclusion and Access to Opportunities. Someone on the CoR will probably be asked to sit on and participate in a Faculty Senate/Commission on Faculty Affairs task force to help flesh out this resolution and opportunities. There was also a discussion about the fact there is not an internal updated website for any of the information, agendas, minutes or resolutions coming out of the Faculty Senate, as a place for the faculty body to see what is going on and leave feedback or comments.
   c. T. Mayer gave a presentation to the CoR on the information she shared with the BoV on November 6. “The Virginia Tech Research Enterprise: A Financial Perspective”. T. Mayer made the point about the components of a global university and how Virginia Tech plans on working towards this end. T. Mayer presented financial information from NSF HERD showing research expenditures and Virginia Tech’s place in the rankings. The overview broke down VTs expenditures by source- 65% Federal, 13% Industry and 20% State and local and then a further breakdown of the federal dollars and which agencies those come from. To become a top 100 Land-Grant Global Institution, VT is looking at peer organizations and how they have been able to experience continued growth even with the compression of the federal government budgets. T. Mayer explained what external funding we receive supports. VT is well poised to engage with the state and it is critically important we do so as well as remain in partnership with the federal government. T. Mayer reviewed the university research enterprise and the 3 major pillars to include Non-Medical Academic Colleges, Academic Medical Schools and Affiliated Thematic Research Units in order to provide an overview of another way the
research expenditures are generated and how that affects a school’s rankings. It is CoR’s intention that the remainder of this discussion occur at the December meeting.

d. Committee for Research Competitiveness – overview provided electronically by S. Duma and read by J. Irish. This committee will be looking to schedule a meeting with T. Mayer in the near future.

e. Open Access Policy Draft- K. McGuire reported on their outreach efforts, including a presentation and feedback discussion with CNRE, as well as the public version of their website (https://sites.google.com/a/vt.edu/cor-oa-policy-working-group/) which contains a FAQ section. They are planning another meeting with Legal Counsel to discuss the transfer and copyright clarification information when someone leaves VT, i.e., what occurs with the IP and copyright. There is not a lot of information that can be found on the interpretation of the legal documents for these issues. K. McGuire will bring updates on the VT draft policy to the CoR for a discussion, then push it out to faculty through VT News for broader publication. Looking to have a broader discussion of the Draft Policy prior to an official 1st Reading. For any department or group that would like to host a brief (~20 min) presentation of the draft policy followed by discussion and feedback, contact the COR OA Committee at openaccess@vt.edu.

f. No update on Policy 13005

g. Task Force on Shared Governance- A lot of discussion surrounding the process of where a resolution goes once it leaves a commission and goes to Faculty Senate. Would like for a training session to be offered for new faculty to the university and/or faculty new to serving in one of the capacities of the governance system at VT.

h. Faculty Handbook – Peggy Layne and Ellen Plummer working on the resolutions to accompany updates to the sections on Research Faculty drafted in FY17. The resolutions should be available next time CoR meets.

i. Sanjay Raman, Director of VT-ARC, provided an overview of VT-ARC, established in 2010 to “extend the brand and impact of Virginia Tech”. VT-ARC 2.0 established with a leadership change in 2016. S. Raman reviewed the mission statement, core values and strategic goals of VT-ARC. Identified the two key Destination Areas that are players currently with VT-ARC- Data & Decisions and Integrated Security. VT-ARC is a big part of National Security research at VT along with the Hume Center, although they do not perform all of the National Security research at VT. S. Raman described the value added for the VT ecosystem that ARC can provide to the university to include flow funding through to the university, provide access to interesting customers, collaborative business capture, secure research facilities, internship and externship opportunities for students, a unique commercialization model for VT research and technologies.

j. T. Mayer informed the group about the different types of affiliated research units at VT to include the institutes- there are two main types which are thematic institutes and investment institutes, the newer opportunities at VT to include LINK and LAUNCH, VTKnowledgeworks is being phased out and VT is bringing that knowledge enterprise back onto campus.

IV. Adjournment – meeting adjourned at 1708
Following the last meeting of the Commission on Research, the Committee for Research Competitiveness met on October 9, 2017. Present were Stefan Duma, Chair, and committee members Ben Corl, Kurt Zimmerman, and Barb Lockee. The committee discussed our charge for the 2017-2018 academic year that included two goals: investigate methods to increase support for alternative sources of funding (ie, foundations and corporate sponsors), and also increase competitiveness for government grants. We discussed various ways of engaging faculty through focus groups and surveys. We decided as a group to first engage the research leadership in order to understand better the most useful path forward. We concluded that we would schedule a meeting with Vice President Theresa Mayer and Link Director Brandy Salmon.

On October 20, 2017 the Committee for Research Competitiveness met with Link Director Brandy Salmon. Present were Stefan Duma, Chair, and committee members Ben Corl, Kurt Zimmerman, and Barb Lockee. We had a very productive discussion on methods and ideas regarding better engagement with foundations and corporate sponsors. In particular, Brandy Salmon asked us for more information on two topics. First, regarding current instrumentation and capacities, Brandy noted that it would be useful to have a complete and working inventory of Virginia Tech assets. Second, we were asked to focus on what facilities and equipment would be best to add to Virginia Tech to make our researchers more competitive.
Brief History of VT-ARC

• The Virginia Tech Applied Research Corporation (VT-ARC) is a 501(c)3 university-affiliated research organization established in 2010 to “extend the brand and impact of Virginia Tech”

• Focused on the federal government market, primarily in the National Capital Region; initial focus was on Cybersecurity and Intelligence

• Headquartered on the 7th floor of the VT Research Center – Arlington (VTRC-A), with satellite office in the VT Corporate Research Center in Blacksburg. The VTRC-A location was built out with spaces for conducting classified research at various levels.

• Commenced operations in 2011, initial revenue in 2012

• Leadership transition occurred in summer 2016 → VT-ARC “2.0”

• Revenue in FY17 reached nearly $10M, ~85% CAGR FY12-FY17
VT-ARC “2.0” Strategic Plan: Mission and Goals

Mission Statement:
Deliver superior analytic and technology solutions to government and non-government customers, extending the brand and impact of the Virginia Tech Research and Innovation enterprise.

Core Values:
• Excellence
• Integrity
• Collaboration
• Service (Ut Prosim)

Strategic Goals:
• Develop and maintain leading applied research capabilities, leveraging the power of Virginia Tech, for solving complex, dynamic customer challenges
• Serve as an innovation and commercialization platform for the university, supporting translation of VT technologies to the marketplace
• Create financial and synergistic value for the VT enterprise
• Achieve sustainable growth and profitability
Communications, RF & Cyber Systems

- RF Systems Modeling & Testing
- Spectrum Sharing Analysis
- Interference Mitigation Techniques
- Software-Defined Comms
- Mobile App Development
- Cyber Physical Systems/IoT Security

S&T Analytics & Innovation

- Basic/Applied R&D Assessment
- Tech Transition & Transfer
- Workforce Development
- Partnering and Outreach
- Economic Impact Analysis
- Market Research and Intelligence
- IP Strategy
- Technology Portfolio Management

Data & Decision Science

Predictive Analytics & Disruptive Futures

- Future Scenario Studies
- Global S&T Trend Analysis
- Emerging Technology Mapping
- Horizon Scanning
- Foresight and Forecasting
- Technology Sequence Analysis

Business Areas

Integrated Security

Resilient Systems

- Requirements Assessment
- Vulnerability Assessment
- Red Teaming and War Gaming
- Risk and Uncertainty Evaluation
- Operations Analysis
- System Dynamics and Engineering
- Chem/Bio Defense
- Resilient Air & Space Systems

Functional Teams

Information Sciences (Cheng)

- Future Scenario Studies
- Global S&T Trend Analysis
- Emerging Technology Mapping
- Horizon Scanning
- Foresight and Forecasting
- Technology Sequence Analysis

Decision Sciences (Wolfe)

- Requirements Assessment
- Vulnerability Assessment
- Red Teaming and War Gaming
- Risk and Uncertainty Evaluation
- Operations Analysis
- System Dynamics and Engineering
- Chem/Bio Defense
- Resilient Air & Space Systems

Engineering, Testing & Evaluation (DiFrancisco)

- Basic/Applied R&D Assessment
- Tech Transition & Transfer
- Workforce Development
- Partnering and Outreach
- Economic Impact Analysis
- Market Research and Intelligence
- IP Strategy
- Technology Portfolio Management

Finance and Administration (Maffei)

University Capabilities

Collaboration and Reachback augmenting in-house capabilities

Business Capture Cell
Programs and Projects

S&T Analytics & Innovation

Predictive Analytics & Disruptive Futures

Resilient Systems

Communications, RF & Cyber Systems
National Security @ Virginia Tech

Virginia Tech National Security Enterprise

Continuum from basic to translational research that engages students, faculty, and researchers in unclassified, restricted, and classified settings

Hume Center for National Security and Technology

University Research Center
Emphasis on Advanced Research and Student-Oriented Programs

Virginia Tech Applied Research Corporation

Integrated 501(c)3
Emphasis on Technology Expertise and Mission Insight

NSA/DHS Center for Academic Excellence
IC Center for Academic Excellence
CyberCorps Scholarship for Service Site

Arlington
Blacksburg

$18M
Annual Program Revenue

100
Cleared Researchers, Staff and Professors

300
Annual Academic Publications

250
Students Engaged Annually

DOD S&T
IC S&T
Other Federal Industry, Foundations

Continuum from basic to translational research that engages students, faculty, and researchers in unclassified, restricted, and classified settings.
Value Added for the Virginia Tech Ecosystem

• Collaboration and Teaming on R&D programs
• Access to new, more operational customers beyond the traditional R&D funding agencies
• Flow-through funding to VT faculty and research groups
• Access to programs/data the University cannot otherwise reach due to legal or other restrictions
• Collaborative business capture
• Secure research facilities in Arlington for classified project work & business development
• A unique commercialization model for VT research and technologies, with revenue flow to faculty and research groups
• Internship/externship opportunities for VT students
• Enhancement of the Virginia Tech brand, particularly in the NCR
Representative Ongoing VT-ARC Collaborations with VT

S&T Horizon Scanning for ASA(ALT)

- Building predictive models for S&T emergence
  - VT-ARC Decision Sciences collaborating with DAC

DSO: Wireless Spectrum

- Spectrum sharing test and demonstration
  - VT-ARC Engineering, Testing and Eval collaborating with HUME, Wireless@VT

Cyber Physical Systems Manufacturing Security

- Developing partnerships in CPSS for DHS/NSF, proposed research in QA/QC and AM Cybersecurity for SOCOM, OSD
  - VT-ARC Info Sciences collaborating with DREAMS, CPSSMFG

TRIPPWIRE

- High altitude sensor payload and platform test campaign and demonstration for DoD customer
  - VT-ARC Engineering, Testing and Eval collaborating with HUME, Space@VT

Business Sensitive Information
Proprietary to VT Applied Research Corporation
VT-ARC as a key element in translation/commercialization of VT technologies
Differentiated from technology licensing and venture-backed spin-outs
Closely coupled continuous innovation loop with VT faculty
Identifies and exploits new markets for VT innovations/IP
Increased research funding flow to VT, increased revenue to VT-ARC

Pilot DAC/EMBERS commercialization effort under development now → PreSage
PreSage is a fully automated proven forecasting engine providing timely, actionable intelligence on a range of societal events, before they occur. Up to the moment forecasts are available via subscription services and tailored to need.

PreSage accurately forecasts events impacting society such as:
- Disease outbreaks
- Mass migrations
- Threats to airports
- Threats to shipping and transit
- Cyber attacks
- Cyber bullying

The technology underpinning PreSage grew out of a $22 million U.S. Intelligence Advanced Research Projects Agency (IARPA) program.

What would you like to forecast? Ask us about our development options. We build to suit.

Luke Sloby, luke.sloby@vt-arcp.org | (518-874-8142) x239

We offer subscription services to PreSage forecasts featuring API access, S3 dumps, and an intuitive feature-rich dashboard.
Questions?
PRESENT: D. Stauffer; K. Albright; J. Billingsley; D. Clubb; M. Davenport; V. Fowler; T. Hammett; R. Holloway; M. Kasarda; C. Leeth; R. Paneton for S. Morton; K. Redican; J. Sible; S. Sumner for A. Grant; D. Thorp; S. Ulrich; B. Watford for J. Ross; R. Willis; L. Zietsman

ABSENT WITH NOTIFICATION: E. Coupey; K. Hosig; L. Khansa; A. Zink-Sharp

ABSENT WITHOUT NOTIFICATION: G. Daniel; M. Hajj; A. Knoblauch; S. Metko; A. Roche

VISITORS: N. Akers; S. Biscotte; G. Costello; M. Coulter; A. Dickow; R. Hester for D. Breslau; R. Shryock

CALL TO ORDER

The meeting was called to order at 3:00 PM by Dean Stauffer.

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

D. Stauffer announced the October 23, 2017 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/2017-2018/oct23/minutes_cusp_oct_23_17_final_rev.pdf

OLD BUSINESS:

Resolution 2017-18.C Resolution to Revise Pathways General Education Curriculum (Presidential Policy Memorandum No. 125 and University Core Curriculum/Curriculum for Liberal Education (CLE) (PPM 24)) and Implementation for the Pathways General Education Curriculum to Amend the Language for Foundational Discourse Courses, Second Reading

An editorial change was noted that the resolution should be amended to exclude the word “and” and end the sentence with a semicolon in the third statement beginning with “Whereas.”

The motion was made and seconded to present for second reading Resolution 2017-18.C Resolution to Revise Pathways General Education Curriculum (Presidential Policy
Memorandum No. 125 and University Core Curriculum/Curriculum for Liberal Education (CLE) (PPM 24) and Implementation for the Pathways General Education Curriculum to Amend the Language for Foundational Discourse Courses

D. Stauffer informed the Commission that the Faculty Senate had conducted a review of Resolution 2017-18.C. and provided their feedback in the form of a letter to the Commission. The letter was made available as a resource to the Commission for this meeting.

D. Stauffer opened the floor for discussion on Resolution 2017-18.C beginning with R. Shryock summarizing the Faculty Senate feedback. R. Shryock informed the Commission that at a well-attended Faculty Senate meeting last week, the Faculty Senate overwhelmingly rejected the approval of Resolution 2017-18.C.

R. Shryock and A. Dickow-Presentation of Topics of Concern:

- Requested clarification of “a necessary foundation of language proficiency in English” with defined, measurable, and assessable skills. They explained that data shows there are transferable skills between languages.

- Addressed the concern that standards will be lowered and foreign language courses will be used in an easier path to getting around general education requirements when in actuality it is more difficult for students choosing a more challenging path. This impacts a small number of students who completed 4 years of high school foreign language and want to go further and possibly pursue a minor.

- Presented to the Commission that academic departments will have to opt in to allow non-English courses to count, and they currently control their own checksheets.

- Clarified that native speakers are not permitted to take language courses and are permitted to take content courses.

- Summarized that the resolution does not align with the university’s goal to be a global land-grant university and noted that the rejection of the resolution will allow for a course-by-course review and approval, and increased discourse opportunities.

Commission Follow Up Discussion Topics:

- **General Education: Requirements/Academic Departments**
  - R. Holloway elaborated on the 6 credit hour foundational discourse courses regarding the range of communication skills and context
(writing, speaking, and visual communication) embedded in the courses.

- J. Sible explained that academic department approval of checksheets is a separate process than approving general education courses. There are implications of this for students pursuing double majors.
- R. Holloway expressed concern related to a department specifying specific courses for general education and potential impact on a common university general education.

- **Proficiency**
  - J. Sible provided background information. The Pathways Ad Hoc Review Committee seeks a clear, consistent, and unambiguous policy as the Committee realized there was ambiguity, and that the original intention was for the foundational discourse classes to be taught in English with advanced/applied outcomes offered in foreign languages. She explained that proficiency involves context and skill and that the intention is not to push out foreign language courses from general education.
  - D. Thorp emphasized the need for our students to master the English language in support of academic success.
  - It was pointed out by several Commission members that the proficiency does not specifically address grammar, and that 1105 and 1106 are not grammar focused.
  - V. Fowler presented to the Commission that the English Department is supportive of non-English courses counting towards discourse requirements, sees this as an excellent opportunity for students, and recognizes both the academic rigor and transferable skills between languages.
  - B. Watford and R. Holloway called for greater discussions about final grades of D as evidence of proficiency, in general.
  - R. Panneton expressed thanks for bringing forward the important issue of proficiency and hopes for greater discussions in the future on effective ways of improving proficiency.

- **General Education: Goal/Concern for Students**
  - D. Stauffer, V. Fowler, R. Shryock reminded the Commission of the limited impact due to the small number of students electing this option.
  - R. Holloway emphasized our shared goal of encouraging broad general education options and not restricting opportunities for our students.
Hearing no further discussion, D. Stauffer called for a vote on Resolution 2017-18.C.

The motion to approve Resolution 2017-18.C, as written, did not pass: Yes (3); No (13); Abstain (1).

**NEW BUSINESS:**

**Resolution 2017-18.D Resolution to Approve New Degree, Bachelor of Arts in Science, Technology, and Society, First Reading**

The motion was made and seconded to present for first reading Resolution 2017-18.D, Resolution to Approve New Degree, Bachelor of Arts in Science, Technology, and Society

D. Stauffer opened the floor for discussion on Resolution 2017-18.D.

Discussion and clarification topics included the following:

The Commission suggested a minor edit to the resolution to exclude the reference to SACS notification. G. Costello is going to verify.

On behalf of D. Breslau, R. Hester provided information in response to Commission comments and questions regarding topics of incorporation of departmental minors, the interdisciplinary nature of the discipline, the core concepts taught in the core classes, the research into other schools offering similar programs, and employable skills students will gain, and potential job opportunities for students in the program.

R. Holloway presented that there is currently a graduate degree and the proposed undergraduate degrees will offer opportunities in this area of study for undergraduate students.

Resolution 2017-18.D has been forwarded to Faculty Senate for comment. Following the Faculty Senate review and response, the second reading of Resolution 2017-18.D will take place at the next available CUSP meeting.

**Resolution 2017-18.E Resolution to Approve New Degree, Bachelor of Science in Science, Technology, and Society, First Reading**

The motion was made and seconded to present for first reading Resolution 2017-18.E, Resolution to Approve New Degree, Bachelor of Science in Science, Technology, and Society

D. Stauffer opened the floor for discussion on Resolution 2017-18.E.

Discussion and clarification topics included the following:
The Commission members and R. Hester discussed the 6 credit difference between the Bachelor of Arts and Bachelor of Science degrees and the unique, interdisciplinary nature of the program which is centered around more science-based coursework inherently.

Resolution 2017-18.E has been forwarded to Faculty Senate for comment. Following the Faculty Senate review and response, the second reading of Resolution 2017-18.E 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
No Report.

Athletic Committee
No Report.

Commencement Committee
No Report.

Honor Council
M. Davenport reported the Honor Council hosted the first ever site visit with students and faculty from the College of William & Mary, representing a collaborative opportunity to present the Virginia Tech Undergraduate Honor System. Additionally, M. Davenport reported the Honor Council has resolved five hundred cases, and further that the new system has helped to reduce unresolved cases, increased the reporting of cases due to more confidence in the system, and continues to receive positive feedback in the improved system.

D. Stauffer shared his positive experience with the new system as well.

Library Committee
No Report.
Undergraduate Curriculum Committee

M. Kasarda presented the report of the October 27, 2017 Undergraduate Curriculum Committee. A motion was made and seconded to approve the report of the October 27, 2017 Undergraduate Curriculum Committee.

**UNDERGRADUATE CURRICULUM COMMITTEE REPORT—OCTOBER 27, 2017 FOR “FIRST AND SECOND READING” UNANIMOUS APPROVAL**

<table>
<thead>
<tr>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>New:</td>
</tr>
<tr>
<td><strong>Spring 2018</strong></td>
</tr>
<tr>
<td>College of Liberal Arts and Human Sciences</td>
</tr>
<tr>
<td>COMM 4344 Free Speech in Cyberspace (CM-3822)</td>
</tr>
<tr>
<td><strong>Fall 2018</strong></td>
</tr>
<tr>
<td>College of Architecture and Urban Studies</td>
</tr>
<tr>
<td>SPIA 2114 Public Service Leadership (CM-3812)</td>
</tr>
<tr>
<td><strong>College of Engineering</strong></td>
</tr>
<tr>
<td>CHE 3124 Chemical Engineering Simulations and Process Modeling (CM-3802)</td>
</tr>
<tr>
<td><strong>Pamplin College of Business</strong></td>
</tr>
<tr>
<td>REAL 3044/ FIN 3044 Financing Real Estate Projects (CM-3819)</td>
</tr>
<tr>
<td>Revised:</td>
</tr>
<tr>
<td><strong>Spring 2018</strong></td>
</tr>
<tr>
<td>College of Liberal Arts and Human Sciences</td>
</tr>
<tr>
<td>COMM 4254 Topics in Multimedia Journalism (CM-3821)</td>
</tr>
<tr>
<td>MS 1005, 1006 Military Science I, Army Reserve Officer Training Corps (CM-3708)</td>
</tr>
</tbody>
</table>
MS 2005, 2006 Military Science II, Army Reserve Officer Training Corps (CM-3709)

MS 3005, 3006 Military Science III, Army Reserve Officer Training Corps (CM-3710)

MS 4005, 4006 Military Science IV, Army Reserve Officer Training Corps (CM-3711)

RUS 1105-1106 Elementary Russian (CM-3832)

Fall 2018

Honors College

UH 1504 PGS Study Abroad Pre-Departure Seminar (CM-3768)

Degrees, Majors, Options, Minors

Degrees

New:

Effective Graduating Calendar Year 2021

College of Liberal Arts and Human Sciences

Establishment of New Degree: Bachelor of Arts in Science, Technology, and Society (BASTS), Major: Science, Technology, and Society (STAS); First effective date to declare major: Fall 2018; First effective date to graduate: Spring 2021 (CM-3686)

Checksheet: Bachelor of Arts in Science, Technology, and Society, Major: Science, Technology, and Society (STS); Effective for students graduating in calendar year 2021 (CM-3686)

Establishment of New Degree: Bachelor of Science in Science, Technology, and Society (BSSTS), Major: Science, Technology, and Society (STAS); First effective date to declare major: Fall 2018; First effective date to graduate: Spring 2021 (CM-3686)

Checksheet: Bachelor of Arts in Science, Technology, and Society, Major: Science, Technology, and Society (STS);
Minors

Revised:

Effective Graduating Calendar Year 2019

College of Agriculture and Life Sciences

Checksheet: Minor in Animal and Poultry Sciences (APSC); Effective for students graduating in calendar year 2019 (CM-3769)

Checksheet: Minor in Animal and Poultry Sciences - Equine (APEQ); Effective for students graduating in calendar year 2019 (CM-3770)

University Curriculum Committee for General Education

L. Zietsman presented the report of the October 11, 2017 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the report of the October 11, 2017 Pathways Ad Hoc Review Committee.

L. Zietsman presented the report of the October 25, 2017 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the report of the October 25, 2017 Pathways Ad Hoc Review Committee.

PATHWAYS AD-HOC REVIEW COMMITTEE REPORT—OCTOBER 11, 2017

For “Second Reading”
Not Approved: Unanimous

COURSES

Revised:

Undergraduate Education

UNIV 1824: Pathways to Success: Exploring Your Future (CLE Area 3, Pathways Reasoning in the Social Sciences GE03, Ethical Reasoning GE10) (CM 3773)
**COURSES**

New:

**CLE Spring 2018/Pathways Fall 2018**

**College of Architecture and Urban Studies**

SPIA 2314 (HNFE 2314): Active Transportation for a Healthy, Sustainable Planet (CLE Areas 3 and 7, Pathways Reasoning in the Social Sciences GE03, Intercultural and Global Awareness GE11) (CM 3813)

Revised:

**CLE Spring 2018/Pathways Fall 2018**

**College of Liberal Arts and Human Sciences**

AINS 1104: Introduction to American Indian Studies (CLE Area 2, Pathways Reasoning in the Social Sciences GE03, Intercultural and Global Awareness GE11) (CM 3740)

COMM 2084: Media and Society (CLE Area 3, Pathways Reasoning in the Social Sciences GE03, Ethical Reasoning GE10) (CM 3724)

MUS 3314: Instrumental Ensemble Music (CLE Area 6, Pathways Critique and Practice in Design and the Arts GE06, Ethical Reasoning GE10) (CM 3747)

RLCL 2514 (SOC 2514): Asian American Experience (CLE Area 3, Pathways Reasoning in the Social Sciences GE03, Intercultural and Global Awareness GE11) (CM 3745)

SPAN 3444: Early Spanish-American Culture and Literature (CLE Area 2, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3772)
College of Science

BIOL 1105, 1106: Principles of Biology (CLE Area 4, Pathways Reasoning in the Natural Sciences GE04, Ethical Reasoning GE10) (CM 3760)

MATH 1535,1536: Geometry and Mathematics of Design (CLE Area 5, Pathways Quantitative and Computational Thinking GE05, Intercultural and Global Awareness GE11) (CM 3764)

CONSTITUENT REPORTS

Commission on Administrative and Professional Faculty Affairs

No report.

Staff Senate

No report.

Faculty Senate

D. Stauffer reported that President Sands spoke at the Faculty Senate meeting last week.

Student Government Association

R. Willis reported on behalf of A. Roche that the Student Government Association will be hosting an open invitation event and additional information will be provided soon.

Graduate Student Assembly

No report.

ADJOURNMENT

A motion was made and seconded to adjourn the meeting at 4:03 PM.

Respectfully Submitted,
Megan Coulter, Office of the University Registrar

11/9/17
PRESENT: D. Stauffer; J. Billingsley; V. Fowler; S. Sumner for A. Grant; M. Kasarda; L. Khansa; A. Knoblauch; C. Leeth; R. Panneton for S. Morton; C. Boone for J. Ross; J. Sible; D. Thorp; S. Ulrich; R. Willis; A. Zink-Sharp

ABSENT WITH NOTIFICATION: D. Clubb; E. Coupey; R. Holloway; K. Hosig; K. Redican; L. Zietsman

ABSENT WITHOUT NOTIFICATION: K. Albright; G. Daniel; M. Davenport; M. Hajj; T. Hammett; S. Metko; A. Roche

VISITORS: N. Akers; G. Costello; M. Coulter; R. Sparks

CALL TO ORDER

The meeting was called to order at 3:00 PM by Dean Stauffer.

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

D. Stauffer announced the November 6, 2017 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/2017-2018/nov27/minutes_cusp_nov_6_17_final.pdf

OLD BUSINESS:

Resolution 2017-18.D Resolution to Approve New Degree, Bachelor of Arts in Science, Technology, and Society, Second Reading

The motion was made and seconded to present for second reading Resolution 2017-18.D Resolution to Approve New Degree, Bachelor of Arts in Science, Technology, and Society.

D. Stauffer reported that the Faculty Senate had waived its right to review Resolution 2017-18.D.

D. Stauffer opened the floor for discussion on Resolution 2017-18.D.
Discussion topics included the following:

- Difference between Bachelor of Arts and Bachelor of Science degrees and credit hour requirements;
- Market/employment research related to the discipline;
- Inherit interdisciplinary nature of the discipline.

Hearing no further discussion, a motion was made and seconded to APPROVE Resolution 2017-18.D.

**The motion passed unanimously.**

**Resolution 2017-18.E Resolution to Approve New Degree, Bachelor of Science in Science, Technology, and Society, Second Reading**

The motion was made and seconded to present for second reading Resolution 2017-18.E Resolution to Approve New Degree, Bachelor of Science in Science, Technology, and Society.

D. Stauffer reported that the Faculty Senate had waived its right to review Resolution 2017-18.E.

D. Stauffer opened the floor for discussion on Resolution 2017-18.E.

Hearing no discussion, a motion was made and seconded to APPROVE Resolution 2017-18.E.

**The motion passed unanimously.**

**REPORTS AND MINUTES FROM COMMISSION COMMITTEES/SUB-COMMITTEES**

**COMMITTEE REPORTS**

**Academic Support Committee**

No Report.

**Academic Policies Committee**

No Report.

**Athletic Committee**

S. Sumner presented the minutes of the October 10, 2017 meeting of the University Athletics Committee. A motion was made and seconded to accept the minutes of the October 10, 2017 meeting of the University Athletics Committee.
The motion passed unanimously.

S. Sumner also announced there was a presentation about concussions at the last University Athletics Committee meeting which lead to helpful dialogue regarding the communication process among the Athletics Department, Schiffert Health Center, Cook Counseling Center, and faculty members. A subcommittee is forming to review and streamline this process to more align with standard faculty notifications.

Commencement Committee

No Report.

Honor Council

No Report.

Library Committee

No Report.

Undergraduate Curriculum Committee

No Report.

University Curriculum Committee for General Education

On behalf of L. Zietsman, M. Kasarda presented the report of the November 8, 2017 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the report of the November 8, 2017 Pathways Ad Hoc Review Committee.

The motion passed unanimously.

| PATHWAYS AD HOC REVIEW COMMITTEE REPORT—NOVEMBER 8, 2017 |
| For “First and Second Reading” |
| Unanimous Approval |

| COURSES |

| New: |

| CLE Spring 2018/Pathways Fall 2018 |
College of Liberal Arts and Human Sciences


EDEP 2444: Motivating Yourself and Others (CLE Area 3, Pathways Reasoning in the Social Sciences GE03, Intercultural and Global Awareness GE11) (CM 3825)

Revised:

CLE Spring 2018/Pathways Fall 2018

College of Liberal Arts and Human Sciences

ENGL 1604: Introduction to Poetry (CLE Area 2 and 6, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3826)

ENGL 1614: Introduction to Short Fiction (CLE Area 2 and 6, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3838)

ENGL 1624: Introduction to Detective Fiction (CLE Area 2, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3827)

ENGL 1634: Introduction to Shakespeare (CLE Area 2 and 6, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3839)

ENGL 1644: Introduction to World Literature (CLE Area 2 and 7, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3840)

ENGL 1654: Introduction to Science Fiction and Fantasy (CLE Area 2, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3841)

ENGL 1664: Introduction to Women’s Literature (CLE Area 2, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3842)
CONSTITUENT REPORTS

Commission on Administrative and Professional Faculty Affairs

No report.

Staff Senate

No report.

Faculty Senate

D. Stauffer reported that Dr. Clarke, Interim Executive Vice President and Provost, spoke at the last Faculty Senate meeting.

Student Government Association

J. Billingsley reported on behalf of A. Roche that the Student Government Association will be hosting an open invitation event titled “You Want Me to Pay What?? A Conversation on the Price of Textbooks” on Tuesday, November 28, 2017, at 7:00 p.m. in the Newman Multipurpose Room. The campus community is welcome to attend for a dialogue about solutions for the high cost of textbooks.

Graduate Student Assembly

S. Ulrich reported that the Graduate Student Assembly is actively researching and encouraging the entire campus community’s involvement regarding the potential tax bill implications, particularly for international graduate students. There is a useful webpage posted to the Graduate School website (http://graduateschool.vt.edu/tax-bill-potential-impact.html) with helpful links,
resources, data and research, and ways to get involved, including contacting elected representatives.

**ADJOURNMENT**

A motion was made and seconded to adjourn the meeting at 3:20 PM.

_Respectfully Submitted,_  
_Megan Coulter, Office of the University Registrar_
MINUTES
COMMISSION ON UNDERGRADUATE STUDIES AND POLICIES
December 11, 2017
230 Student Services Building, 3:00 PM

PRESENT: D. Stauffer; J. Billingsley; D. Clubb; M. Davenport; V. Fowler; S. Sumner for A. Grant; T. Hammett; R. Holloway; K. Hosig; M. Kasarda; L. Khansa; C. Leeth; G. Long for S. Morton; K. Redican; B. Watford for J. Ross; J. Sible; D. Thorp; S. Ulrich; R. Willis; L. Zietsman; A. Zink-Sharp

ABSENT WITH NOTIFICATION: S. Metko

ABSENT WITHOUT NOTIFICATION: K. Albright; E. Coupey; G. Daniel; M. Hajj; A. Knoblauch; A. Roche

VISITORS: N. Akers; G. Costello; M. Coulter; R. Sparks

CALL TO ORDER

The meeting was called to order at 3:00 PM by D. Stauffer.

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

D. Stauffer announced the November 27, 2017 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/2017-2018/nov27/minutes_cusp_11_27_17.pdf

REPORTS AND MINUTES FROM COMMISSION COMMITTEES/SUB-COMMITTEES

COMMITTEE REPORTS

Academic Support Committee

No Report.

Academic Policies Committee

No Report.
Athletics Committee

S. Sumner presented the minutes of the November 8, 2017 meeting of the University Athletics Committee. A motion was made and seconded to accept the minutes of the November 8, 2017 meeting of the University Athletics Committee.

The motion passed unanimously.

Commencement Committee

No Report.

Honor Council

M. Davenport announced that historically the honor review system was closed on Reading Day but that it would remain open this year. Additionally M. Davenport reported that they are researching the implementation of the anti-plagiarism software, Turnitin, across the university as a teaching opportunity for students to use during the entire paper writing process and as a tool for faculty members to use in their research as well.

Library Committee

No Report.

Undergraduate Curriculum Committee

M. Kasarda presented the report of the December 1, 2017 Undergraduate Curriculum Committee. A motion was made and seconded to approve the report of the December 1, 2017 Undergraduate Curriculum Committee.

The motion passed unanimously.

| UNDERGRADUATE CURRICULUM COMMITTEE REPORT—DECEMBER 1, 2017 |
| FOR “FIRST AND SECOND READING” |
| UNANIMOUS APPROVAL |

<table>
<thead>
<tr>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>New:</td>
</tr>
</tbody>
</table>

Spring 2018
College of Liberal Arts and Human Sciences
LAHS 1014 Academic Recovery and Success Strategies (CM-3837)

College of Agriculture and Life Sciences
AAEC 4434 Commodity Investing by Students (CM-3869)

Summer I 2018

College of Natural Resources and Environment
FIW 2244 Natural History of the Great Smoky Mountain (CM-3719)

Fall 2018

College of Architecture and Urban Studies
SPIA 3554 Transdisciplinary Problem Solving for Social Issues (CM-3816)

College of Engineering
ISE 4434 Supply Chain and Operations Engineering (CM-3852)

Revised:

Spring 2018

College of Natural Resources and Environment
FREC 4454 Urban and Community Forestry (CM-3861)

Fall 2018

College of Engineering
AOE 3224 Ocean Structures (CM-3793)
AOE 3264 Thermodynamics and Marine Propulsion (CM-3794)
AOE 4265 – 4266 Ocean Vehicle Design (CM-3798)
Majors

Rename:

Effective Graduating Calendar Year 2020

College of Liberal Arts and Human Sciences

Rename Major to: English (ENGL), under Bachelor of Arts in English (BAENG); First year and term to enroll: Spring 2018; First year and term to graduate: Winter 2020 (CM-3830)

With approval of renamed Major: English (ENGL), discontinue Major name: Literature and Language (LL), under Bachelor of Arts in English (BAENG); Last effective term to graduate: Fall 2019 (CM-3830)

Options

Revised:

Effective Graduating Calendar Year 2020

College of Liberal Arts and Human Sciences

With approval of renamed Major: English (ENGL), under Bachelor of Arts in English (BAENG), move current Major Option: Literature (LLCW) under Degree: Bachelor of Arts in English (BAENG); Major: English (ENGL); Effective for students graduating in calendar year 2020 (CM-3830)

Checksheet: Major in English (ENGL), under Bachelor of Arts in English (BAENG), Option: Literature (LLCW); Effective for students graduating in calendar year 2020 (CM-3830)

With approval of renamed Major: English (ENGL), under Bachelor of Arts in English (BAENG), move current Major Option: Pre-Education (LLPE) under Degree: Bachelor of Arts in English (BAENG); Major: English (ENGL); Effective for students graduating in calendar year 2020 (CM-3830)

Checksheet: Major in English (ENGL), under Bachelor of Arts in English (BAENG), Option: Pre-Education (LLPE); Effective for students graduating in calendar year 2020 (CM-3830)
With approval of renamed Major: English (ENGL), under Bachelor of Arts in English (BAENG), move current Major Option: Pre-Law (LLPL) under Degree: Bachelor of Arts in English (BAENG) Major: English (ENGL); Effective for students graduating in calendar year 2020 (CM-3830)

Checksheet: Major in English (ENGL), under Bachelor of Arts in English (BAENG), Option: Pre-Law (LLPL); Effective for students graduating in calendar year 2020 (CM-3830)

University Curriculum Committee for General Education

L. Zietsman presented the report of the April 12, 2017 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the report of the April 12, 2017.

The motion passed unanimously.

L. Zietsman presented the report of the November 29, 2017 Pathways Ad Hoc Review Committee. A motion was made and seconded to approve the report of the November 29, 2017.

The motion passed unanimously.

<table>
<thead>
<tr>
<th>PATHWAYS AD HOC REVIEW COMMITTEE REPORT—APRIL 12, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>For “Second Reading”</td>
</tr>
<tr>
<td>Non-unanimous Approval</td>
</tr>
</tbody>
</table>

COURSES

Revised:

Pathways Fall 2018

College of Liberal Arts and Human Sciences

FR 3105, 3106: Composition, Conversation, and Grammar (Pathways Discourse Foundational GE01, Intercultural and Global Awareness GE11) (CM 3138)
PATHWAYS AD HOC REVIEW COMMITTEE REPORT—NOVEMBER 29, 2017
For “First and Second Reading”
Unanimous Approval

COURSES

Revised:

CLE Spring 2018/Pathways Fall 2018

College of Liberal Arts and Human Sciences

ENGL 2744: Introduction to Creative Writing (CLE Area 6, Pathways Advanced/Applied Discourse GE01, Critique and Practice in Design and the Arts GE06, Intercultural and Global Awareness GE11) (CM 3828)

ENGL 4164: Studies in Shakespeare (CLE Area 2, Pathways Advanced/Applied Discourse GE01, Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3829)

ITAL 3305, 3306: Introduction to Italian Literature in Context (CLE Area 2, Pathways Discourse Advanced/Applied GE01, Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3595)

ITAL 3474: Topics in Italian Cinema (CLE Area 2, Pathways Discourse Advanced/Applied GE01, Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3741)

MUS 3164: History of Electronic Music (CLE Areas 2 and 6, Pathways Critical Thinking in the Humanities GE02, Intercultural and Global Awareness GE11) (CM 3831)

PHIL 3414: Aesthetics (CLE Area 2, Pathways Critical Thinking in the Humanities GE02, Ethical Reasoning GE10) (CM 3753)

College of Natural Resources and the Environment

FREC 2554 (NR 2554) (LAR 2554): Leadership for Global Sustainability (CLE Areas 2 and 3, Pathways Critical Thinking in the Humanities GE02, Reasoning in the Social Sciences GE03, Ethical Reasoning GE10, Intercultural and Global Awareness GE11) (CM 3353)
**Pamplin College of Business**

MGT 3444: Multicultural Diversity in Organizations (CLE Areas 3 and 7, Pathways Reasoning in the Social Sciences GE03, Intercultural and Global Awareness GE11) (CM 3737)

**Pathways Fall 2018**

**College of Liberal Arts and Human Sciences**

GER 3105-3106: Grammar, Composition, and Conversation (Pathways Discourse Foundational GE01, Intercultural and Global Awareness GE11) (CM 3683)

**Discontinue:**

**Effective Fall 2018**

**College of Liberal Arts and Human Sciences**

ENGL 4165, 4166: Shakespeare (CM 3829)

**CONSTITUENT REPORTS**

**Commission on Administrative and Professional Faculty Affairs**

No report.

**Staff Senate**

No report.

**Faculty Senate**

No report.

**Student Government Association**

J. Billingsley announced on behalf of A. Roche that the Student Government Association will be hosting “Reading Day with SGA” on December 13, 14, 15 from 9:00 a.m. to 7:00 p.m. in the Squires Commonwealth Ballroom. The event will include coffee and other refreshments, electrical outlets, and extra study space for students.
J. Billingsley also reported on behalf of A. Roche that the Student Government Association event titled “You Want Me to Pay What?? A Conversation on the Price of Textbooks” involved a panel with three students and two faculty members discussing their experiences regarding the cost of textbooks. J. Billingsley encouraged anyone wanting additional information about the panel discussion to contact Avalon Roche.

Graduate Student Assembly

S. Ulrich reported that the Graduate Student Assembly met last Thursday focusing on the tax reform implications for graduate students at Virginia Tech. The Graduate Student Assembly encourages the campus community to contact legislative representatives. For more information, S. Ulrich recommends accessing https://drive.google.com/drive/folders/1V9BajcPhOgiJrUDnu-CNzpmHh0MPaq_H for helpful resources.

Other Business

UC Resolution 2017-18A Resolution to Amend the University Council By-Laws as Recommended by the Governance Task Force

D. Stauffer provided a brief update and then opened the floor for discussion on University Council Resolution 2017-18A.

Discussion topics included the following:

- Reminder to the four formal constituent groups (Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association) of the absolute period of the four week timeframe for resolution review.
- No provision to expand review calendar into the summer months.
- Desire for clarification of the language in Item 2.B considering most resolutions are brought to commissions, not developed by the commissions.
- Necessity for clarifying the resolution language, in particular, defining the word “its” in Line 7 of Item 2.C which will clarify the intention of the sentence. Does “its” refer to each respective constituent group?
- Timelines for SCHEV proposals and potential impact.
- Observation that the Faculty Senate provided response or waived the right to review resolutions during the last year in a timely manner that did not delay resolution approvals.
- SGA is reviewing processes to implement its plan and/or software (or some other electronic solution other than email) to track resolutions, materials, and deadlines, in support of these reviews.
- Impact related to Fall 2018 effective term.
- Alignment of constituent monthly meeting dates in support of bi-weekly commission meeting dates.
• Volume of resolutions varies by year.
• Workload and concern for the impact on the students involved in the process.

Hearing no further discussion, D. Stauffer will capture and provide feedback to the University Council prior to the second reading on February 5, 2018.

ADJOURNMENT

A motion was made and seconded to adjourn the meeting at 3:28 PM.

Respectfully Submitted,
Megan Coulter, Office of the University Registrar
Governance Task Force Final Report

Date: November 3, 2017
To: University Council
From: Governance Task Force
Subject: Final Report

Task Force Charge:

- To collect data on the impacts of the CFA 2015-16B Resolution on Shared Governance, the key provision of which requires the following commissions to refer their resolutions to the Faculty Senate: The Commission on Faculty Affairs, The Commission on Research, the Commission on Undergraduate Studies and Policies, and the Commission on Graduate Studies and Policies. The Faculty Senate, at its discretion, may issue a formal recommendation regarding the resolution that would accompany the resolution when it is presented to University Council for consideration. (Resolution passed 2/1/16).

- To recommend based on data analyzed any changes to the system of shared governance intended to enhance the consultative role of the constituent groups.

- To analyze the consultative role of the respective constituent groups.

List of the Task Force Members:

Dr. Sam Easterling (chair)
Kim O’Rourke (Secretary of University Council)
Rami Dalloul (Faculty Senate)
Sue Teel (Staff Senate)
Matthew Chan (GSA)
Alexa Parsley (SGA)
Ellen Plummer (Provost Office)
Gary Long (CUSP)
Joe Merola (CFA)
Andrew Neilson (COR)
Scott Salom (CGSP)

Overview of Task Force Work Plan: The Governance Task Force met seven times (September 21, 2016, October 19, 2016, December 13, 2016, February 8, 2017, February 23, 2017, April 12, 2017, & November 3, 2017) to discuss and make recommendations on the improvement of the current shared governance structure at Virginia Tech. The Task Force also discussed areas of shared governance that present challenges (specifically for the Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association).
Task Force Outcomes:

1. The Task Force determined that there were no negative impacts associated with CFA 2015-16B Resolution on Shared Governance. The requirement for resolutions from specific commissions to be sent to Faculty Senate for review and comment did not delay the progress of a resolution through the governance system. As a result, the Task Force recommends expansion of this process to include review by all four constituents groups of resolutions emanating from all commissions. (Refer to outcome No. 2.)

2. UC Resolution 2017-18A – Resolution to Amend the University Council By-Laws as Recommended by the Governance Task Force (attached) has been approved by the Faculty Senate, Staff Senate, Graduate Student Assembly, and Student Government Association and will be presented to University Council for first reading on December 4, 2017. This resolution will be sent to all commissions prior to the December 4 University Council meeting as a courtesy.

3. A calendar has been added to the publicly accessible governance website (www.governance.vt.edu) where committees, commissions, and councils can add meeting times and locations.

4. Suggestions were made for a central office or person to work with commissions on governance training. The new Office of the Vice President for Policy and Governance will assume this responsibility.

5. The Office of the Vice President for Policy and Governance is implementing formal Governance 101 training session. Requests for training can be sent to abmyers@vt.edu.

Other Findings:

1. There is a need to develop a more effective transition process of leadership of commissions, SGA, and GSA to ensure transfer of knowledge and best practices.

2. The Governance Task Force discussed a potential change the University Council Constitution to require approval by the GSA and SGA (along with Faculty and Staff Senates) before any proposed change to the constitution goes to University Council. The Task Force determined that this matter was beyond the scope of its charge.

This report concludes the work of the Governance Task Force

Submitted by:
Dr. Sam Easterling
Chair of the Task Force
MINUTES
UNIVERSITY ADVISORY COUNCIL ON
STRATEGIC BUDGETING AND PLANNING
November 16, 2017

PRESENT: Maria Balota (via WebEx), Michele Borgarelli, Tim Hodge, Cayce Myers, Andi Ogier, Robert Sebek, Dwight Shelton, Ken Smith, Michael Sorice, Rex Willis and Jack Washington (substitute for Jason Soileau).

ABSENT: Cyril Clarke, Henri de Hahn, Omchand Mahdu, Quinton Nottingham, Randy Penson, Hans Robinson, Benjamin Tracy, Linbing Wang, and Susan White.

1. CALL TO ORDER AND WELCOME NEW MEMBERS

Mr. Tim Hodge, Assistant-Vice President for Budget and Financial Planning, called the meeting to order. Mr. Hodge introduced himself then asked members to introduce themselves, as we had several members who were attending the council for the very first time.

2. APPROVAL OF THE SEPTEMBER 21, 2017 MINUTES

Mr. Hodge stated that the September 21, 2017 minutes have been approved and forwarded to the University Council for posting on the web.

3. UPDATE ON STATE BUDGET OUTLOOK

Mr. Hodge gave an update on the state budget outlook, which he shared the state’s revenue growth of 4.9% is higher than projected at the end of October. He reminded the council that while the state’s revenues are currently growing, the state has made commitments for that growth into K-12 education and Medicaid. Mr. Hodge also shared that the federal government had yet to continue to fund the CHIP program, which would take up additional resources at the state level if not reauthorized.

4. UNIVERSITY’S FIVE YEAR ENERGY ACTION PLAN

Dr. Ruban Avagyan, Campus Energy Manager, presented an overview of the University’s Five Year Energy Action Plan to the council. Dr. Avagyan shared with the council that in 2014-15, the Facilities Department conducted a benchmarking analysis of all campus buildings, identifying 50 buildings on campus as energy intensive buildings (“energy hogs”). These 50 buildings represented only 35% of the university’s facilities, but collectively accounted for approximately 70% of the utility costs. As a result, a Five Year Energy Action Plan was developed to address ten of the “energy hog” buildings each year.

The main action items for each phase of the Energy Action Plan included:

- Conducting energy audits within the selected ten buildings;
- Implementing energy retrofit projects;
- Retro-commissioning;
- Installation of meters;
- Connecting to the Energy Management Platform.
Dr. Avagyan reviewed the first three phases of the Energy Action Plan with the Council, including a list of the buildings selected for each phase, what action items were completed and the resulting annual energy costs savings to the university. Dr. Avagyan added that they were in the process of adding a full time Energy Engineer and Energy Auditor, which will allow Facilities to complete energy audits in house. Dr. Avagyan concluded that with the implementation of the Five Year Energy Action Plan, aside from the energy savings, the university gained the added benefits of improved building performance, improved indoor air quality, better lighting, increased longevity of mechanical and lighting systems, and carbon footprint reduction. Additionally, Mr. Hodge explained how the energy savings helped fund the university budget. A PDF of the presentation is attached to these minutes.

5. No further business was discussed, and the meeting adjourned at 5:01 p.m.
VT 5-YR Energy Action Plan

Presented by: Ruben Avagyan, Ph.D., PE, CEM
OFFICE OF ENERGY MANAGEMENT

- Monitor and analyze energy consumption on campus
- Establish energy-reduction goals and the roadmap to achieve them
- Coordinate implementation of energy reduction programs
- Oversee execution of energy retrofit projects
- Verify post-retrofit energy savings
- Report energy statistics to various stakeholders
5-YR ENERGY ACTION PLAN

- In 2014-15, Facilities Department conducted benchmarking analysis of campus buildings which identified about **fifty** energy intensive buildings or “energy hogs”.

- Representing only **35 percent** of the university’s grounds, these facilities collectively account for approximately **70 percent** of the utility costs associated with operation of the main campus.

- Following this study, a comprehensive Five Year Energy Action Plan was developed to concentrate on **ten** “energy hogs” per year.
5-YR ENERGY ACTION PLAN

- Each phase of the Plan includes:
  - Conducting Energy Audits within selected ten buildings
  - Implementing Energy Retrofit projects
  - Retro-commissioning
  - Installing Steam Meters in the buildings connected to the Power Plant
  - Connecting “energy hogs” to the Energy Management Platform (Iconics)
### 5-YR ENERGY ACTION PLAN

#### Phase I (2015-2016) Buildings:

<table>
<thead>
<tr>
<th>Building ID</th>
<th>Building Name</th>
<th>Area, sq.ft.</th>
<th>Electric, $</th>
<th>Total Cost, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>158</td>
<td>Hahn Hall - North</td>
<td>85,051</td>
<td>371,018</td>
<td>900,378</td>
</tr>
<tr>
<td>157</td>
<td>Hahn Hall - South</td>
<td>71,106</td>
<td>332,158</td>
<td>794,198</td>
</tr>
<tr>
<td>113</td>
<td>Latham Hall</td>
<td>84,277</td>
<td>622,980</td>
<td>866,212</td>
</tr>
<tr>
<td>121</td>
<td>Life Sciences 1</td>
<td>71,799</td>
<td>333,435</td>
<td>680,820</td>
</tr>
<tr>
<td>140</td>
<td>Vet Med Phase 1</td>
<td>35,960</td>
<td>127,443</td>
<td>161,458</td>
</tr>
<tr>
<td>150</td>
<td>Vet Med Phase 2</td>
<td>70,790</td>
<td>250,882</td>
<td>317,842</td>
</tr>
<tr>
<td>149</td>
<td>Vet Med Phase 3</td>
<td>66,640</td>
<td>236,174</td>
<td>299,209</td>
</tr>
<tr>
<td>118</td>
<td>Litton-Reaves Hall</td>
<td>146,267</td>
<td>468,150</td>
<td>678,929</td>
</tr>
<tr>
<td>155</td>
<td>Derring Hall</td>
<td>207,929</td>
<td>359,940</td>
<td>646,441</td>
</tr>
<tr>
<td>182</td>
<td>War Memorial Gym</td>
<td>200,961</td>
<td>234,626</td>
<td>528,754</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>1,040,780</strong></td>
<td><strong>3,336,806</strong></td>
<td><strong>5,874,241</strong></td>
</tr>
</tbody>
</table>
5-YR ENERGY ACTION PLAN

Phase I (2015-2016) Results:

- For a combined cost of $2,500,000, close to $450,000 in annual energy cost savings were achieved resulting in 5.5 years of payback.

- The list of completed projects includes optimization of pumping system in North Chiller Plant, installation of steam meters in various buildings, energy audits, initial deployment of Energy Management platform.

- Energy audits revealed a significant number of potential energy saving opportunities which will be implemented in consecutive phases of the Plan.
5-YR ENERGY ACTION PLAN

- Phase II (2016-2017) Buildings:

<table>
<thead>
<tr>
<th>Building ID</th>
<th>Building Name</th>
<th>Area, sq.ft.</th>
<th>Electric, $</th>
<th>Total Cost, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>119</td>
<td>Bioinformatics 1</td>
<td>58,285</td>
<td>238,858</td>
<td>334,957</td>
</tr>
<tr>
<td>120</td>
<td>Bioinformatics 2</td>
<td>71,560</td>
<td>293,261</td>
<td>411,248</td>
</tr>
<tr>
<td>134</td>
<td>Whittemore Hall</td>
<td>155,339</td>
<td>317,581</td>
<td>657,959</td>
</tr>
<tr>
<td>136</td>
<td>Goodwin Hall</td>
<td>154,935</td>
<td>295,734</td>
<td>631,021</td>
</tr>
<tr>
<td>111</td>
<td>Fralin Hall</td>
<td>44,324</td>
<td>219,580</td>
<td>323,621</td>
</tr>
<tr>
<td>156</td>
<td>Davidson Hall</td>
<td>66,023</td>
<td>151,764</td>
<td>334,292</td>
</tr>
<tr>
<td>133C</td>
<td>Hancock Hall</td>
<td>63,075</td>
<td>213,247</td>
<td>367,939</td>
</tr>
<tr>
<td>381</td>
<td>HABB 1</td>
<td>93,860</td>
<td>58,501</td>
<td>293,687</td>
</tr>
<tr>
<td>126</td>
<td>Durham Hall</td>
<td>107,929</td>
<td>242,943</td>
<td>366,533</td>
</tr>
<tr>
<td>124-125</td>
<td>GREENHOUSE COMPLEX</td>
<td>59,968</td>
<td>49,807</td>
<td>103,175</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1,048,817</td>
<td>2,370,440</td>
<td>4,339,309</td>
</tr>
</tbody>
</table>
5-YR ENERGY ACTION PLAN

Phase II (2016-2017) Results:

- For a combined cost of about $3,260,000, close to $730,000 in annual energy cost savings are expected resulting in 4.5 years of payback.

- The list of projects includes ventilation system optimization in the labs, building-wide lighting system upgrades, building automation upgrades, retro-commissioning, installation of steam meters, insulation of bare valves and fittings on the steam lines, weatherization of exterior doors, integration of buildings to the Energy Management platform.

- Similar to Phase I, Energy Audits revealed significant number of potential energy saving opportunities which will be implemented in consecutive phases of the Plan.
**5-YR ENERGY ACTION PLAN**

- **Phase III (2017-2018) Buildings:**

<table>
<thead>
<tr>
<th>Building ID</th>
<th>Building Name</th>
<th>Area, sq.ft.</th>
<th>Electric, $</th>
<th>Total Cost, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>Kelly Hall-ICTAS I</td>
<td>99,411</td>
<td>248,684</td>
<td>481,522</td>
</tr>
<tr>
<td>116</td>
<td>ICTAS II</td>
<td>42,190</td>
<td>145,579</td>
<td>263,478</td>
</tr>
<tr>
<td>151</td>
<td>McBryde Hall</td>
<td>132,224</td>
<td>127,003</td>
<td>321,955</td>
</tr>
<tr>
<td>133</td>
<td>Randolph Hall</td>
<td>165,918</td>
<td>230,118</td>
<td>399,615</td>
</tr>
<tr>
<td>112</td>
<td>Cheatham Hall</td>
<td>65,247</td>
<td>191,844</td>
<td>245,814</td>
</tr>
<tr>
<td>439-452</td>
<td>Vet Med Research Cluster</td>
<td>70,436</td>
<td>171,648</td>
<td>207,128</td>
</tr>
<tr>
<td>174</td>
<td>Torgersen Hall</td>
<td>149,651</td>
<td>281,069</td>
<td>390,648</td>
</tr>
<tr>
<td>190-190A</td>
<td>Southgate Building and PS</td>
<td>82,527</td>
<td>186,790</td>
<td>234,117</td>
</tr>
<tr>
<td>115</td>
<td>Wallace Hall</td>
<td>103,163</td>
<td>187,645</td>
<td>226,613</td>
</tr>
<tr>
<td>110</td>
<td>Engel Hall</td>
<td>45,737</td>
<td>125,401</td>
<td>149,990</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>956,504</strong></td>
<td><strong>1,895,781</strong></td>
<td><strong>2,920,880</strong></td>
</tr>
</tbody>
</table>
5-YR ENERGY ACTION PLAN

- Phase III (2017-2018) expectations:
  - Received $3,700,000 from the Office of Budget and Financial Planning
  - Projected annual energy savings of about $855,000
  - Facilities received approval from OBFP to support the establishment of two base FTE including an Energy Engineer and an Energy Auditor. These two new employees will allow Facilities to build its own team of surveyors, focusing on conducting in-house energy audits.
In addition to substantial energy savings, the Plan will benefit the university in other ways including improvement of building performance and indoor air quality, better lighting, increased longevity of mechanical and lighting systems, and carbon footprint reduction.

Installation of the software platform will greatly improve the energy accounting process, provide visualization, and assist with tracking and verification of energy savings.