The University of Vermont
FACULTY SENATE

Curricular Affairs Committee of the Faculty Senate
Minutes
Thursday, May 3, 2018, 4:15 – 6:15 pm

Present:	Professors Almstead, Dickinson, Everse, Garrison, Goodwin, Ivakhiv, Kasser, Kervick, Marshall, Paris, Rosebush, Rowe, Sisk, Strickler, Tomas, Wojewoda, GSS Representative Bonnie Cantrell
Absent:	Professor Cepeda-Benito, Dale, Hazelrigg, Hughes, Monsen, Nichols, Ultsch, SGA Representative McHugh
Guests:	Brian Reed, Cindy Forehand, Beth Taylor-Nolan

Chair Alstead called the meeting to order at 4:18 pm in 427A Waterman.

I. **Approval of the Minutes**. The minutes of the April 5, 2018 meeting were approved as written.

II. **Chairperson's Remarks**
   - Laura Almstead announced that the Faculty Senate approved all five of the proposals presented at the April meeting, and will be going to the Board of Directors in May.

   - CAC members whose terms are ending have received notice via email and are encouraged to run for re-election.

III. **Reports:**
   A. **New PhD in Physics, CAS.** Stephen Everse and Rosemary Dale have reviewed and recommend approval of the proposal for a new Doctor of Philosophy (Ph.D.) in Physics submitted by the Graduate College in conjunction with the College of Arts and Sciences (CAS). The program will be housed in the Physics Department and Prof. Valeri Kotov will become the first Director of Physics Ph.D. program (3-year terms). The anticipated start date for the program would be Fall 2019. The proposal for a Ph.D. program in Physics demonstrates demand from students, faculty, and potential employers. As proposed, the program should strengthen research and teaching at the University as well as enhance the institution's reputation. As a result the program is expected to become a focal point for attracting additional research funds to the University.

Motion: Laura Almstead called a vote to approve the proposed new Doctor of Philosophy (Ph.D.) in Physics submitted by the Graduate College in conjunction with the College of Arts and Sciences (CAS).
Vote: 16 Approve, 0 Oppose, 0 Abstain

IV. APR Reports

A. **Theatre.** Colby Kervick and Sue Kasser acted as the review subcommittee, and their report is attached to these minutes. The Department of Theatre comprising programs in Theatre and Speech and Debate completed a thorough Self-study as part of the APR. The Department has dedicated and talented faculty deeply committed to their students and the quality of the programs they offer. The external review generated a comprehensive report citing both strengths and recommended areas of improvement. The resulting information generated a series of recommendations that aligned with items addressed in the self-study, but also revealed some new potential focal areas for program improvements and enhancements. The Theatre Department was afforded the opportunity to respond to the External Reviewer's recommendations and their response is summarized in this APR summary report. We believe the process was followed with integrity and that the program should be commended for a thorough and generative APR.

Motion: Laura Almstead called a vote to accept the subcommittee's report on the APR of the Theatre Department.
Vote: 16 Approve, 0 Oppose, 0 Abstain

B. **Biology**. Christina Wojewoda and Stephen Everse acted as the review subcommittee and recommend approval of the Department of Biology. Their report is attached to these minutes. The External Reviewer's report found that the Biology Department is "strong with excellent faculty, superior leadership, dedicated staff, and high-quality students at all levels. Improvements are needed in assessment, the approach to undergraduate advising, and "right-sizing" the number of faculty and graduate student appointments. The physical facilities are wanting but we realize that this is a problem without a short-term solution. Overall, the University of Vermont should take pride in this unit and should strive to support it in line with the university's strategic priorities."

Motion: Laura Almstead called a vote to accept the subcommittee's report on the APR of the Biology Department.
Vote: 16 Approve, 0 Oppose, 0 Abstain

V. Other Business:

A. **CAC Operating Procedures.** Laura Almstead reported that all Faculty Senate Standing Committees have been asked to submit a document describing the operating procedures of the committee. The draft document is attached to these minutes.

Motion: Steven Everse moved to accept the CAC operating procedures as drafted, and to present them to the Faculty Senate Executive Council.
Vote: 16 approve, 0 Oppose, 0 Abstain

VI. **New Business:**
- Brian Reed brought forward a suggested revision to the cover sheet for Proposals for New Academic Progam or Research Endeavor. It was suggestion that a percent of online delivery be added to the section regarding delivery method. Discussion ensued around the need for and use of the information. Brian will explore this issue further, and return to the CAC with more specific suggestions for revision if needed.

- Laura Almstead thanked the committee for their work over this year.

VII. **Adjournment.** Ellen Rowe moved to adjourn at 5:19 p.m. The motion was seconded and carried.

MEMO

To: Curricular Affairs Committee of the Faculty Senate
From: Stephen Everse (Chair) & Rosemary Dale
Date: April 24, 2018
Re: Approval of a proposal for a new Doctor of Philosophy (Ph.D.) in Physics submitted by College of Arts and Sciences

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We have reviewed a proposal for a new Doctor of Philosophy (Ph.D.) in Physics submitted by the Graduate College in conjunction with the College of Arts and Sciences (CAS) and recommend approval. The program will be housed in the Physics Department and Prof. Valeri Kotov will become the first Director of the Physics Ph.D. program (3 year terms). The anticipated start date for the program would be Fall 2019.

Program Description and Rationale
The Physics Ph.D. offers research opportunities in theoretical and experimental condensed matter physics, astronomy and astrophysics, and soft condensed matter physics and biophysics. The program will train a new generation of students to attack some of the most critical problems facing our world. Specific emphasis will be placed on how the skills that graduates learn in the Physics Ph.D. program can be applied to complex and interdisciplinary challenges in technology, materials design and renewable energy.

A Physics Ph.D. did exist at UVM for a brief time (1967—74) before it, and other Ph.D. programs, were eliminated due to significant financial constraints. This leaves Vermont with the distinction of being the only state in the union without a Ph.D. program in Physics. This program builds upon a very successful M.S. program (2001 the American Institute of Physics ranked UVM among the top 20 professional physics Master's programs in the nation) with the intent of reducing the "brain drain" of students leaving the state to pursue a Physics Ph.D. elsewhere.

Justification and Evidence for Demand
Currently the lack of a Ph.D. program in Physics has hindered the recruitment of new faculty, excluded application for some grants, and has forced faculty to fund students at other institutions to complete extramurally funded work. Additionally, with the new STEM classroom the Physics Department will address both the attrition and Drop-Fail-Withdraw rates using classrooms designed for Student-Centered Active Learning Environment with Upside Down Pedagogies (SCALE-UP) and these graduate students will play a central role of engaging students in these classrooms.

Over the last 5 years the Physics Department has seen a 50% increase in majors with indications that this trend will continue. Nationally Physics Ph.D. programs are at their highest levels in a decade.

Relationship to Existing Programs
UVM offers several Ph.D. programs in STEM disciplines, including: Bioengineering, Chemistry, Civil & Environmental Engineering, Complex Systems & Data Science, Computer Science, Electrical & Biomedical Engineering, Mathematics, Mechanical Engineering, and Materials Science. Materials Science is an

interdisciplinary program that includes elements of Chemistry, Physics, and multiple branches of Engineering, allowing for course and research flexibility tailored to student interests and backgrounds. It overlaps no more with Physics than it does with Chemistry or Engineering. Introducing the Physics Ph.D. program at UVM will balance the strength of the pillar disciplines of Materials Science, allowing the program to more truly reflect its interdisciplinary nature.

Curriculum

Completion of the program will require passing a comprehensive exam (end of year 2). Students are given two opportunities to pass the comprehensive exam. In addition to the written portion, there is also an oral portion that consists of a Ph.D. dissertation proposal given after the start of a dissertation research project. Seventy-five credits are required as described below (GPA of 3.0 must be maintained):

Required Courses
All of the core courses must be completed with a grade B or better within the first two years of graduate study.

Number	Name	Credits
PHYS 301	Mathematical Physics	3
PHYS 311	Advanced Dynamics	3
PHYS 313	Electromagnetic Theory	3
PHYS 323	Contemporary Physics	3
PHYS 362	Quantum Mechanics II	3
PHYS 365	Statistical Mechanics	3

Nine credits of elective courses must be completed with a grade of B or better within the first three years of graduate study.

Number	Name	Credits
PHYS 222	Biological Physics	3
PHYS 242	Intro to Solid State Physics	3
PHYS 256	Computational Physics	3
PHYS 257	Modern Astrophysics	3
PHYS 258	Relativity	3
PHYS 264	Nuclear and Elementary Particle Physics	3
PHYS 321	Theoretical Physics	3
PHYS 331	Biological Physics	3
PHYS 341	Solid State Physics	3
PHYS 351	Physics of Materials	3
PHYS 356*	Computational Physics II	3
ME 336	Continuum Mechanics	3
ME 350	Multiscale Modeling	3
MPBP 323	Biophysical Techniques	4
CHEM 260	Advanced Physical Chemistry	3
BIOC 301	General Biochemistry I	3
BIOC 302	General Biochemistry II	3

*: A new elective course will build upon the existing Computational Physics courses (PHYS 256, 296 in previous years).

At least 20 credits of PHYS 491 (Doctoral Dissertation Research) and 3 credits of PHYS 305 (Teaching College Physics) are required to complete the program.

Admission Requirements and Process

Criteria for admission include:
- B.S. in physics or related field
- GPA averages
- GRE (general scores)
- Candidate's research interests

Strong candidates will be invited for a campus and/or Skype interview. Acceptance to the program will be the purvey of the Admissions Committee which has a strong record of success with their acceptances into the M.S. program.

Anticipated Enrollment and Impact on Current Programs

Initially the Department plans to admit a cohort (N = 5) students every other year (FY20, FY 22 and FY24) before accepting a new cohort yearly.

The programs most likely to be impacted by the creation of a Ph.D. in Physics are the M.S. in Physics and the Material Sciences (MATS) Ph.D. program. The M.S. in Physics will be recast as a terminal option for self-supported professional students or for students admitted to the Ph.D. program but fail to demonstrate suitable progress in their first three years. Both the authors and the Director of the MATS program feel that the reinstatement of the Physics Ph.D. will have a positive impact on the MATS program by increasing the number of students which will increase the diversity of courses offered for students in both programs. The Physics Ph.D. program is expected to assist in faculty recruitment for both programs, thus increasing grant funding for faculty in the programs which will only enhance UVMs ability to recruit the best students to the programs.

Advising

The Physics Graduate Committee will work directly with each student over their first two years to develop their individual learning plans. Upon successful completion of a written comprehensive exam and identification of a research mentor the student will assemble a Dissertation Committee made up of at least 4 members of the Graduate College faculty, with at least two from Physics. Consistent with Graduate College rules the Chairperson of the Dissertation Committee will be a graduate faculty member outside the Physics Department. The Dissertation Committee will interact with the student at least once per year through an evaluation process that will require the student to prepare a short summary of accomplishments in the previous year and plans for the following one. All members will be required to sign off on this yearly status report which the student will then submit to the Chair of the Physics Graduate Committee.

Assessment Plan

Their assessment plan is directly linked to the specific goals of the program:

1. Provide students with a diverse and deep understanding of the core subjects underlying all research in modern physics including: classical mechanics, quantum mechanics, statistical mechanics, electrodynamics, many-body physics, computational and experimental methods.
   <u>Assessment Metric</u>: Students will be required to pass a comprehensive written examination in year two of the program ensuring they have a suitable grasp of the core subjects.
2. Graduate exceptional students who will excel in careers in industry and the academy.
   <u>Assessment Metric</u>: Expectation of multiple publications in high profile journals, invited and contributed talks, high quality dissertations and tracking of jobs post-graduation.

3. Enhance collaborative research in the College of Arts & Sciences at UVM.
   <u>Assessment Metric</u>: Number of students co-advised with non-Physics faculty members, diversity of faculty serving on student dissertation committees and publications written with colleagues across departments and colleges.
4. Increase the number of under-represented minorities (URM) with a Ph.D. in Physics.
   <u>Assessment Metric</u>: Continue and extend our partnership with the Bridge Program of the American Physical Society and track the number of URM students who successfully graduate from the program.

Staffing Plan, Resource Requirements, and Budget

The current CAS Five-Year Plan calls for a tenure track hire in Physics. Current staff are available to support additional financial activities (stipends as well as anticipated increase in grant funding). To initiate the program in a revenue positive manure, the Department plans to admit a cohort (5 students) every other year (FY20, FY 22 and FY24) before accepting a cohort every year. Currently the Physics Department has 11 GTAs distributed between the Physics M.S. program and that MATS program to support the teaching needs of the Department. The Graduate College has agreed to fund two additional GTAs; therefore, in the future 8 GTAs will support in Physics Ph.D. program and 5 GTAs will support students in the MATS program.

Evidence of Support

With the exception of the CEMS Dean, there is substantial support for the Ph.D. in Physics from across campus. The Vice President for Research, the Director of the VACC, and the Deans of LCOM and RSENR join CAS Dean Falls in support of this proposal. The Chairs of Biology, Chemistry, Mechanical Engineering, Molecular Physiology and Biophysics, and Physics all provide strong letters of support. Importantly, the Director of the MATS program is also firmly in support. The Director of the American Physical Society also provided a letter in support stressing the positive effect the program will have on all science disciplines at UVM as well as developing a work force for the state.

Summary

In summary, the proposal for a Ph.D. program in Physics demonstrates demand from students, faculty, and potential employers. As proposed, the program should strengthen research and teaching at the University as well as enhance the institution's reputation. As a result the program is expected to become a focal point for attracting additional research funds to the University.

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Faculty Senate Curricular Affairs Committee
Academic Program Review Subcommittee Report
Theatre
April 24, 2018

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Academic Program Review Subcommittee: Colby Kervick and Sue Kasser
External Reviewers: Kathleen Macey and Michael Staczr

The external review team visited the University of Vermont's Theatre program on March 7-8, 2018 as part of the Department of Theatre's Academic Program Review (APR). This report summarizes the strengths and weakness of the program identified through the review process, provides a synopsis of the external reviewers' recommendations including responses from the Theatre and Speech/Debate program faculty, and offers the APR internal review subcommittee's conclusions.

Overview of Theatre Program

The Department of Theatre describes its mission as "situating Theatre within the larger context of artistic human expression" noting that the program strives to emphasize the study of theatre as one reflecting social practice and the human condition. The Department offers 1 major in Theatre and 3 minors (Theatre, Musical Theatre and Speech). They currently have 40 declared Theatre majors, 41 Theatre minors, 4 Musical Theatre minors and 8 Speech minors. The Department is structured so that the Theatre Program and the Speech and Debate Program are organized into two units with separate curriculum. The Department notes that the Theatre curriculum is closely aligned with the Royall Tyler Theatre main stage productions whereas the Speech and Debate curriculum is tied to the activities of the Lawrence Debate Union. Therefore, as part of this review, the Department completed separate self-studies. There are seven full time tenured and tenure-track faculty members and four full time lecturers serving both the Theatre and Speech and Debate programs. Additionally, there are four professional staff members and an administrative coordinator. It was the impression of the external reviewers that the faculty/staff to student ratio was adequate to meet the needs of students.

Strengths and Weaknesses
Strengths:

Strengths of the program include the research productivity of tenured and tenure track faculty as well as the active engagement of non-tenure track faculty in research or regional/national scholarly activities. The external reviewers also commented that the current curricular offerings enable students to pursue personal and professional aspirations within theatre arts and that the speech curriculum provides important communication tools within the context of a broad based liberal arts education. Furthermore, the external reviewers commended the faculty for their resourcefulness and creative and innovative teaching, commitment to advising, and high level of passion and devotion to the students and programs. The external reviewers felt that graduates of the program are well prepared to enroll in graduate school or pursue employment upon graduation. They also noted both the theatre and speech and debate programs' commitment to diversity as it aligns to the University's strategic priority in this area. The Theatre Program also evidences strong adherence to the National Association of Schools of Theatre accreditation standards and is on par with the most current national trends for assessment.

Weaknesses:

The external reviewers expressed concerns that the current curriculum in the theatre program is too general, advising that, in the curriculum review process that is underway, the program consider developing tracks or areas of specialization for students, such as specific foci on acting, design/technical theatre and/or theatre studies as examples. They also noted that some of the courses in Speech and Debate appear to be outdated and in need of revision and encouraged the program to consider exploring development of a major in Speech or human communications. They also had concerns that there is a lack of full time tenure track faculty in the Speech and Debate program.

Additional concerns included structural issues with the Royall Tyler Theatre. These concerns include the need to renovate to be ADA compliant allowing students with accessibility challenges full access to all aspects of the building, as well as the need for additional classroom, storage and rehearsal space. While they did acknowledge that additional space would be available soon at the Taft school location, there are concerns whether it will be sufficient. In addition, the ADA compliance issues are a serious concern and the reviewers felt that the lack of compliance in this area puts the University at risk.

The reviewers also expressed concerns about the web presence for the program noting challenges navigating the web site, easily locating the major/minor course descriptions, and the lack of video links that could enhance the Department's ability to attract prospective students. Related to this, they also recommended having a stronger social media presence. Lastly, the external reviewers had concerns regarding staffing level for the Lighting Design Technician, which is currently at .75 — they felt that the FTE is not a realistic representation of the time required to fulfill the responsibilities of the position.

External Reviewers' Recommendations
- Curricular recommendations for Theatre program included: seek to better align curriculum with current educational trends including consideration of "tracks" or specializations, continue to update curriculum in Speech and Debate, and explore expanding Speech and Debate into a major.
- Develop a stronger integration of Speech and Debate with the Theatre program or consider making Speech and Debate its own Department. An alternative would be to create more alignment with coursework that could dovetail and complement both programs.
- Increase University financial support for Lawrence Debate Team. Consider adding graduate teaching assistants to help with coaching and mentoring.
- Add 0-1 credit course offering for production credits within major and minor. This will allow for oversight of student engagement, address liability for students participating and better track enrollment.
- Consider garnering an increase in University level funding for Productions rather than relying solely on box office revenue. Investment from the University level would better align with funding models more typically found in HEI theatre programs across the country. The reviewers stated clearly that they know of no other program in the country that must "self-fund" their productions/curricular requirements.
- Revise the website to make it more user friendly and help with promotion of department offerings and productions.
- Increase recruitment efforts through engagement with national recruiting organizations such as NACAC and state theatre conferences. Consider adding an audition requirement as part of the audition process.
- Increase Lighting Design Technician FTE from current staffing level of .75
- Address facilities issues including need for additional storage, classroom/rehearsal/performance space and most importantly ADA compliance issues.

Department Response:

Speech and Debate: They share the concern and are hopeful that curricular revisions may yield opportunities for existing faculty to serve both units and are looking towards a potential future hire in the area of communication and media studies. They also acknowledged (as did external reviewers) that Dr. Parmett is currently undergoing curricular review and revision of the Speech and Debate program. They do not agree that Speech and Debate should become a separate department and feel there are clear advantages to remaining one department. They are exploring curricular integration opportunities as well as potential interdisciplinary projects. The department agrees with the concerns about University financial support for Lawrence Debate Union and is very interested in the possibility of being able to add a graduate student to help support and mentor. They would welcome any additional financial support the University can offer to LDU and/or Speech and Debate.

Theatre: The program is currently undergoing curricular review and revision informed through a recent symposium and through research on comparable institutions. They anticipate revising the B.A. to better prepare students to pursue a variety of career tracks and acknowledged that although the external reviewers recommended "tracks" there are other models under consideration. They also wanted to note that the external reviewers mistakenly stated that current majors are unable to take more than two courses in any content/discipline area. In actuality, majors can take up to four 3-credit courses.

Credit Options: Faculty is in favor of exploring the 0-1 credit option further as a way to maintain records of student participation in productions.

Increased University funding for Productions: Faculty are in favor of increasing University funding support because it would enable the department to diversify production offerings and expose students to a wider range of theatre practice and performance modes, rather being encumbered by the need to guarantee box office returns.

Recruitment Strategies: Faculty are interested in more opportunity to attend national college fairs and state theatre conferences, but acknowledged limited capacity to do so with current staffing/workloads. Faculty intend to research whether audition or comparable interview requirements would enhance recruitment efforts and elevate the stature of the program. They also wanted to acknowledge their recent collaborative efforts with the UVM admissions department and statewide high school counselors.

Facilities: Faculty agree that there is not enough storage and classroom space at Royall Tyler but have concerns that the additional space at Taft will not be sufficient to meet their needs. They also noted that their last APR in 2007 also cited the need for more space, but this has been unaddressed since the last APR. The faculty also share concern about ADA compliance issues and how this impacts students, faculty and patrons.

Website: Faculty did not share the concerns noted by external reviewers, noting that significant effort has been dedicated to transitioning the Department web content to the new University required DRUPAL platform.

Summary and Conclusions

The Department of Theatre comprising programs in Theatre and Speech and Debate completed a thorough self-study as part of the APR. The Department has dedicated and talented faculty deeply committed to their students and the quality of the programs they offer. The external review generated a comprehensive report citing both strengths and recommended areas of improvement. The resulting information generated a series of recommendations that aligned with items addressed in the self study, but also revealed some new potential focal areas for program improvements and enhancements. The Theatre Department was afforded the opportunity to

respond to the External Reviewer's recommendations and their response is summarized in this APR summary report. We believe the process was followed with integrity and that the program should be commended for a thorough and generative APR.

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Faculty Senate Curricular Affairs Committee
Academic Program Review Subcommittee Report
Biology

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Academic Program Review Subcommittee: Christi Wojewoda, MD and Stephen Everse, Ph.D.

External Reviewers: Norine Noonan, Ph.D. (University of South Florida St. Petersburg) and Stephen Roberts, Ph.D. (Missouri University of Science)

The external review team visited the University of Vermont's Biology Department for a 2 day review on March 1-2, 2018 as part of the Department's Academic Program Review (APR). This report summarizes the strengths and weakness of the program identified through the review process, provides a synopsis of the external reviewers' recommendations, and offers the APR internal review subcommittee's conclusions.

Overview of the Biology Department:
• Degrees offered: Biology minor, Zoology minor, Biology BA, Zoology BA, Zoology BS, accelerated MS, MS in Teaching, traditional MS, and PhD; the Department also shares responsibility for the Integrated Biological Science BS (IBSBS) with Plant Biology and involved in the both the Neuroscience BS and minor
• Number of faculty: 13 tenure track faculty, with one tenure-track search successfully completed for a Fall 2018 start, one faculty member planning on leaving UVM at the end of this academic year and one retiring June 1; in addition one faculty member has a full-time administrative assignment outside of the Department; there are also 6 full-time lecturers and 5 research faculty
• Number of majors/minors and how numbers have trended over time: 607 Biology, Zoology and IBSBS majors on average from 2011-2017 which makes up 6% of the total UVM undergraduate student body; 44 Biology minors, 17 Zoology minors, 298 Neuroscience majors, 23 Neuroscience minors, 3 Biology MS students and 29 PhD students

Strengths and Weaknesses
The external reviewers were very impressed with the Department as a whole and commented on the quality of the faculty (specifically, their research productivity) and the quality of the students. In addition, the reviewers commented favorably on the presence of women in leadership positions and a healthy and inclusive learning environment for graduate students. They also mentioned the diverse curriculum for graduate students and applauded the commitment of the administrative staff to the program, faculty, and staff. They were also found the creation of a First Year Advisor position this year to be a great addition to the advising model of the Department.

Weaknesses that were identified include the small number of faculty relative to the number of undergraduate biology majors, lack of faculty of color, low compensation for the graduate students, lack of formal assessment of the curriculum, and inappropriate/failing facilities. These will be discussed in more detail below.

External Reviewers' Recommendations
The reviewers broke their recommendations into the following categories:
Faculty:
The reviewers recommend a strategic plan to increase the number of faculty in the Department by 2-3 over the next 6 years. The number of majors requires a faculty of a larger size due to teaching, advising and research burdens. In regards to advising, they suggest faculty focus on the mentorship element of advising including career coaching, graduate school planning, and research idea development rather than course selection which

can now be performed by the First Year Advisor. In addition, there are not enough research opportunities for the number of undergrads within the Department. To address this, they recommend the formation of interdisciplinary research groups.

Student quality and capacity:
The reviewers recommended continuing to make investments into student retention and success such as the First Year Advisor. They also recommend increasing the graduate student stipend to a competitive level and to convert it to 12 months to guarantee summer funding for students. They also recommend encouraging graduate students to explore interdisciplinary collaborations.

Curriculum and assessment:
The reviewers recommend developing an action plan to strengthen assessment for both individual courses and vertically through the curriculum. They state the Department should consider the use of nationally-normed assessment tools to assist in this discussion. This would also enable the identification of curricular gaps that could be addressed and enable the Department to measure its achievement of important student outcomes. While the reliance on a core set of courses for undergraduates is necessary due to the small number of faculty, it makes it difficult for transfer students. It was also commented on by graduate students that the expectations for their comprehensive exams were not clear, and it was recommended to make those expectations more explicit. The reviewers also mentioned the basic knowledge courses for the undergraduate curriculum which is the structure that provides flexibility for students in the life sciences to discover what they want to focus on (and major in). From talking to the undergrad majors, the reviewers found that the centralized structure means there is less regular review and alignment of individual course goals with learning outcomes for the associated majors, leading to a disconnect for students. The department may also have been too strict in the past regarding transfer courses, which made transferring into our majors more difficult and frustrating for students, which the department is now evaluating.

Physical facilities and administrative support:
The external reviewers recommend developing a plan to address the failing facilities through construction, renovation or relocation. The current research and teaching spaces "do not align with the strategic goals of the University nor with the expectations of the University for faculty productivity and student achievement". The facilities may soon become a barrier to recruitment of both faculty and students.

Summary and Conclusions

As quoted from the External Reviewer's report "Here is the "bottom line" for this review: the state of this Department is strong with excellent faculty, superior leadership, dedicated staff, and high quality students at all levels. Improvements are needed in assessment, the approach to undergraduate advising, and "right-sizing" the number of faculty and graduate student appointments. The physical facilities are wanting but we realize that this is a problem without a short-term solution.   Overall, the University of Vermont should take pride in this unit and should strive to support it in line with the university's strategic priorities."

The Internal Review Subcommittee recommends approval of the Department of Biology.

Faculty Senate Curricular Affairs Committee Operating Procedures

RESPONSIBILITIES & MEMBERSHIP
The membership and responsibilities of the Curricular Affairs Committee are described in the following sections of the Faculty Senate Constitution and Bylaws. General information about Faculty Senate Standing Committees, their purpose, and their responsibilities can be found in Section 7 of the Senate Constitution and Bylaws (https://www.uvm.edu/faculty_senate/faculty_senate_constitution_and_bylaws).

7.1.5.1 Curricular Affairs Committee. This committee shall have responsibility for matters related to undergraduate and graduate educational policy and long-range academic planning, including items referred to in Sections 1.1b, 1.1e, 1.1f, 1.1g, 1.2a, and 1.2k. It shall review proposals to initiate, alter, or terminate programs from the Schools and Colleges. Actions taken by this committee and approved by the Faculty Senate will be sent to the Provost for action. The Curricular Affairs Committee shall have double the numbers of members stipulated in 7.121a.

7.1.2 Composition.
7.1.2.1 Elected Members.
a. Number. Except as described below, standing committees and standing subcommittees shall be composed of at least one member from each of the major academic units (the Colleges of Arts and Sciences, Agriculture and Life Sciences, Education and Social Services, Engineering and Mathematics, and Medicine; the College of Nursing and Health Sciences, Business Administration, and Natural Resources; and the Officers of Extension, and of the Libraries. A unit with more than 200 full-time eligible faculty members may elect one additional member to each standing committee and standing subcommittee.
b. Eligibility. Any eligible faculty member may stand for election by his/her college or school to serve on a standing committee except as otherwise stated in these Bylaws.
c. Term. Members of the standing committees shall be elected for three years or as otherwise stated in these Bylaws, starting on July 1. Terms shall be staggered so that approximately one-third of the standing committee members shall be elected each year.
d. Election. The election of standing committee members shall be the responsibility of the individual college and school faculties. Elections shall be held no later than April of each year and shall be conducted by secret ballot distributed to all eligible faculty members of the college/school. An opportunity must be provided for all eligible faculty members to volunteer to run for election to Senate standing committees. The Faculty Senate shall supervise the elections of Senate Standing Committees; concerns regarding election irregularities must be communicated to the Senate President by May 1.
e. Vacancies. If a standing committee member vacates his/her seat the vacancy shall be filled by a special election within the unit from which s/he was elected. The term of a member under these circumstances shall commence immediately and shall normally be for the unexpired term of the regularly elected member. If a standing committee member is granted leave for one year or less a replacement shall be elected by a special election within the unit from which s/he was elected to take the absent standing committee member's seat for the period of the leave.
f. Attendance. A standing committee member absent from three committee meetings in a calendar year in the absence of mitigating circumstances will be considered to have vacated his/her seat.

g. Members of the Senate. A standing committee member may also serve as an Elected Senator. Standing committee members are members of the Senate without vote if not also an Elected Senator.

7.1.2.2 Ex Officio Members. The Senate President is a voting ex officio member of every Faculty Senate committee and subcommittee, with the exception of the Nominating Committee in 3.5, and may designate a member of the Executive Council to act on his/her behalf. The Faculty Senate Vice-President is a nonvoting ex officio member of every Faculty Senate committee and subcommittee except when serving as the Senate President's designee.

7.1.2.3 Student Members.
a. Standing committees may invite graduate and/or undergraduate students designated by student governing bodies on a one-year renewable basis to serve on the committee.
b. In addition to the faculty members elected as described above, the Student Affairs Committee and the Educational and Research Technologies Committee shall also include a graduate and undergraduate student member designated by student governing bodies, renewable yearly.

7.1.2.4. Resource Personnel. Standing committees may add nonvoting resource personnel on the basis of their position, interest, or expertise.

7.1.4 Committee Officers. The chair of each standing committee shall be elected by each committee from its elected membership for a one-year term. The chair of each committee shall appoint a secretary to keep minutes. Standing committee chairs or their designees shall serve as faculty representatives to the appropriate Board of Trustees committees (9.1). The duties of the chair shall be to report to the Senate at least once a year, schedule and conduct meetings, follow up on actions of the committee, serve as committee spokesperson with respect to the duties in 7.13(e), serve as voting members of the Faculty Senate, and serve on the Executive Council.

COMMITTEE PROCEDURES – General

Meetings: The CAC meets on the first Thursday of each month from 4:15pm to 6:15pm. Any deviations to this pattern are indicated in the meeting schedule posted on the Faculty Senate website (https://www.uvm.edu/faculty_senate/senate_calendar); s a list of all meetings for that academic year is also included on each agenda. If there are no items requiring discussion, cancellation of a meeting is at the discretion of the CAC Chair. As indicated in the Faculty Senate Bylaws, members that miss three or more meetings in a year may be asked to leave the committee. If a member is out of town, arrangements may be made for that person to participate by calling in.

Materials: An agenda and documents related to all items to be discussed are distributed at least three days prior to a meeting. Members are expected to read all documents carefully and be prepared for discussion.

Chair Elections: Chairs are elected for one-year terms. A call for nominations (self or from another committee member) will be made at the April meeting, and voting will occur prior to the May meeting, ideally by April 15. Ballots will be distributed electronically by the Faculty Senate support staff and votes collected anonymously. Voting may occur by show if hands if there is unanimous consent from the committee to do so.

End of Year Report: At the end of each academic year, the CAC Chair writes a report summarizing the work of the committee for that year. Reports are submitted to the Faculty Senate Office and posted on the Faculty Senate website (https://www.uvm.edu/faculty_senate/curricular_affairs_committee).

Operating Procedures: Operating procedures will be reviewed each year at the April or May meetings. Modifications/revisions will be submitted to the Senate Executive Council for review and approval.

COMMITTEE PROCEDURES – Academic Matters
Academic matters include new programs, significant revision of existing programs, program terminations, name changes, and course mediation. Guidelines for proposals are posted on the Faculty Senate website (https://www.uvm.edu/faculty_senate/curricular_affairs_committee).   All proposals are circulated (abstract or complete document) to the faculty and deans for comment at least 30 days prior to CAC discussion and voting. The CAC Chair is responsible for transmitting comments anonymously to the CAC Review Subcommittee (described below).

Review Subcommittee Membership: All new program proposals are carefully reviewed by a subcommittee comprised of two CAC members. Proposals for significant revision of existing programs, program terminations, name changes, and course mediation are reviewed by a subcommittee or the committee as a whole depending on the extent of the proposal; more extensive proposals are assigned to a subcommittee. CAC members from the proposing unit cannot serve on the review subcommittee. Members with direct conflicts of interest are also ineligible.

Review Subcommittee Responsibilities: Subcommittees are charged with reviewing proposals based on University policies, the published guidelines relevant to the proposal, and comments submitted during the 30-day comment period. Reviews often involve discussion with the proposers and/or other relevant parties. If the proposal is revised during the review process, the subcommittee or proposer is responsible for sending the revised document to the CAC Chair who transmits it to the Faculty Senate and Provost's offices. At the end of their review, the subcommittee writes a report that summarizes the proposal and any additional information gathered during the review process, and indicates their recommendation to the committee. See Appendix A for an outline of a CAC Review Subcommittee report.

Voting: The Review Subcommittee is responsible for presenting a proposal to the full committee. For proposals not assigned to a subcommittee, the CAC Chair is responsible for presenting. The committee discusses the proposal until members are ready to vote. Proposals reviewed by a subcommittee come to the floor as a seconded motion; proposals reviewed by the committee as a whole require a motion and a second prior to voting. All members may vote on a proposal unless there is a direct conflict of interest, in which case a committee member abstains from voting. Records of votes are recorded in the meeting minutes.

COMMITTEE PROCEDURES – Academic Program Review
The CAC works in conjunction with the Provost's Office to carry out the Academic Program Review Process. Specific responsibilities of the CAC are indicated below.

External Reviewer Selection: The CAC Chair participates in selection of external reviewers for each program.

Internal Review Subcommittee (IRS): A subcommittee comprised of two CAC members is charged with internal oversight of each APR. A CAC member cannot serve on a subcommittee for programs in which they have appointments. For programs that include graduate-level degrees, at least one of the subcommittee members must be a faculty member in the Graduate College. Specific responsibilities are described in Appendix B.

Voting: All members of the CAC are eligible to vote; members who are part of the program under review may choose to abstain. The CAC does not vote to approve a program, but rather votes to approve the IRS's report summarizing the review process. Guidelines for the content of an IRS report can be found in Appendix C. Once approved, reports are transmitted to the Provost's Office.

Summary and Two-Year Follow Up Meetings: The Chair of the CAC chairs both the summary and two-year follow up meetings for all APRs.

Curricular Affairs Committee of the Faculty Senate

MEMO

To: Curricular Affairs Committee of the Faculty Senate
From:
Date:
Re: [Approval/Disapproval] of a proposal for a new [program title] submitted by [responsible Unit(s)]

We have reviewed a proposal for a new [program title] submitted by [responsible Unit(s)] and recommend [approval/disapproval]. [Indicate Departments and/or Faculty involved in the new program as relevant. Specify an intended start date.]

NOTES:
• *Copying/pasting directly from the proposal and/or paraphrasing language in the proposal is fine and encouraged.*
• *You should not need to come up with any of this information yourself, all of it should be in the proposal.*
• *Include (where relevant) any important information you obtained in communications with the proposers. Ask the proposers to revise their proposal if there are any substantive changes and have them send a final version to you and copy the CAC Chair who will pass it on to the Faculty Senate office.*
• *Proposals are all unique; reorganize the sections/information below in whatever way best suits the proposal you're reviewing. The justification, evidence for demand, and relationship to other programs often make sense to group differently. Just be sure to include all the essential information somewhere.*

Program Description and Rationale
• Describe the main elements of the program including (as appropriate):
    › overview of primary purpose (e.g. this new BA will provide students the skills necessary to…)
    › specific program objectives
    › synopsis of the curriculum
    › intended audience (this is particularly important for certificate programs)
• Describe the rationale for inaugurating the new program including (as appropriate):
    › philosophic goals of the program
    › relationship to missions of University and Unit
    › general need (elaborate below or include justification in this section instead; whatever works best)

Justification and Evidence for Demand
• Summarize the justification for inaugurating the new program including:
    › education, social, and/or job market needs
    › specific local and/or regional needs
• Provide evidence that there's a demand for the program (i.e. demonstrate that there's a source of students that will enroll in the program)

Relationship to Existing Programs
• Summarize the unique features in comparison to other UMV programs
• Compare features/components to those at other institutions if relevant
• Describe any connections to existing UVM programs (e.g. if a BS program could provide potential candidates for an existing graduate program)
• Indicate any potential effects on other academic Units/Departments; reference letters of support from affected Units/Departments as appropriate
• Comment on any substantial concerns raised during the comment period and the proposers' response

Curriculum
• List or summarize learning objectives/outcomes [these could also be included in the Program Justification and Rationale if it makes more sense]
• Provide an overview/summary of the requirements for completion
• Include a list/table of required courses (example table below)
• Include elective options in the table of courses if there are a small number of courses; describe the options if there's extensive list
• Clearly indicate new courses; include whether they have been submitted in Course Leaf (you can search by course number here https://catalog-next.uvm.edu/courseadmin/ to see if a form exists in the system and where it stands in the approval process; new courses MUST be submitted in parallel with the proposal)
• Indicate any effects on existing courses (e.g. is there capacity in existing required course)
• Indicate any limitations/restrictions on courses (e.g. students in X major will not be able to count Y course towards completion of the program)

Required Courses

Number	Name	Credits

Admission Requirements and Process
• Describe how candidates will apply to the program and criteria for admission
• Note any requirements for staying in the program (e.g. minimum GPA) as appropriate
• Indicate any majors/minors, etc. that will NOT be eligible for the program

Anticipated Enrollment and Impact on Current Programs
• Indicate number of students anticipated in the first year and in following years
• Note any impact on current programs not included in previous sections
• Comment on any substantial concerns raised during the comment period and the proposers' response

Advising

• Describe the mechanism by which students will be advised

• Indicate Unit(s) responsible for managing the advising process

NOTE – It is not sufficient to simply state that the program will oversee advising. Specific processes and parties involved must be described.

Assessment Plan

• Indicate how the program will be assessed including metrics for evaluation and a plan for obtaining the necessary information

NOTE – It is not sufficient to state that the program will be evaluated via standard departmental procedures and the APR process (though those should be included as appropriate). The plan need not be extensive, but it should be specific in terms of the metrics they'll use for evaluation.

Staffing Plan, Resource Requirements, and Budget

• Indicate any resources necessary for the new program including (as appropriate):
  › staff positions
  › faculty positions
  › administrative positions (including administrative duties that would become part of an existing faculty member's workload)
  › classroom space and/or equipment
  › library resources

• Provide a summary of how the funds will be obtained for the required resources. The proposal should include cost estimates for the first year and total for first five years. Go into details wherever seems necessary/appropriate.

NOTE – If the program relies exclusively on existing resources this section can be very brief, but should still be included.

Evidence of Support

• List all parties that have provided letters of support for the new program

Summary

• Summarize the main components/features of the new program

• Highlight the main strengths if you recommend approval or indicate what the program lacks if you recommend disapproval

• Provide your recommendation to approve or disapprove the proposed new program

Appendix B

Academic Program Review Internal Review Subcommittee Roles & Responsibilities

<u>Programs that are NOT Externally Accredited</u>

Responsibilities	Chair	Member	Third Member[1]
Read & thoroughly understand the Program's Self-Study	Yes	Yes	Yes
Attend second-day working breakfast	Yes	if Chair is unable to attend	No
Attend the exit interview at the end of the site visit	Yes	Yes	invited
Receive the reports of the external reviewers	Yes	Yes	Yes
Receive the formal response of the chair/program director and dean	Yes	Yes	
Meet with the chair and the program faculty after their receipt of the external reviewers' report if the program desires it	Yes	Yes	Yes
Based on participation in the exit interview, reading of the self-study and external reviewers' reports, responses of the dean and chair/program director, and meeting with the program faculty, write a subcommittee report summarizing and offering perspective on the program and the process	Yes	collaborates on writing report	collaborates on writing report
Offer the program the opportunity to respond to the draft **subcommittee** report	Yes	Yes	
Present their report and recommendation to the full CAC for discussion and formal action	Yes	Yes	Yes
Participate in APR Summary meeting (6 mos. from exit interview)	Yes	No	No

[1]Third member appointed from outside the CAC only when a graduate program is being reviewed and the internal review subcommittee lacks a Graduate College member.

Programs that ARE Externally Accredited

Responsibilities	Chair	Member	Third Member[1]
Read & thoroughly understand the program's reaccreditation report and related materials	Yes	Yes	Yes
Meet with the authors of the reaccreditation report, in order to gain additional perspective on the program	Yes	Yes	Yes
Based on the review of reaccreditation materials, write a subcommittee report presenting their perspective on the program and the external reaccreditation materials.	Yes	collaborates on writing report	collaborates on writing report
Offer the program the opportunity to respond to the draft **subcommittee** report	Yes	Yes	
Present the reaccreditation report to the full CAC for discussion and formal action. An author of the reaccreditation report may be invited to be on hand for the presentation, in order to answer questions.	Yes	Yes	Yes
Participate in APR Summary meeting (6 mos. from exit interview)	Yes	No	No

[1]Third member appointed from outside the CAC only when a graduate program is being reviewed and the internal review subcommittee lacks a Graduate College member.

Faculty Senate Curricular Affairs Committee
Academic Program Review Subcommittee Report
[Name of Program]
[Date]

Academic Program Review Subcommittee:
External Reviewers:

The external review team visited the University of Vermont's [name of program] for
a/an XXX-day review on [dates of external review team's visit] as part of the [department's/program's/unit's]
Academic Program Review (APR). This report summarizes the strengths and weakness of the program
identified through the review process, provides a synopsis of the external reviewers' recommendations *[and
responses from the program]*, and offers the APR internal review subcommittee's conclusions.

Overview of [Name of Program]
• Degrees offered
• Number of faculty and ranks
• Number of majors/minors as appropriate and how numbers have trended over time
• Compare enrollments to similar programs at comparable institutions and/or national trends
• Other services or notable features of the program (e.g. service teaching; outreach)

Strengths and Weaknesses
Summarize the main strengths and areas identified in need of improvement noted in the external reviewers'
report. Include any responses from the program and/or information from the self-study as appropriate. Short
overview paragraphs with bullet points are fine.

External Reviewers' Recommendations
Summarize the recommendations documented by the review team and include any responses from the
program. Organize by section as appropriate (e.g. by individual program/degree if the review assessed
multiple programs/degrees and the recommendations are unique for each one; by category – faculty;
curriculum, etc.). Short overview paragraphs with bullet points are fine.

Summary and Conclusions
• Hit the highlights of the program's strengths and reiterate the most substantial/relevant recommendations
• Describe the interactions that occurred between the internal review subcommittee and the
  department/program following the external reviewers' visit (e.g. met with the Department Chair; met with the
  faculty; exchanged e-mails)
• Note any recommendations made by the external reviewers that the subcommittee feels are not appropriate
  with an explanation for the internal subcommittee's conclusion if necessary
• Indicate any steps the program has taken since the external reviewers' visit to address weaknesses and/or
  recommendations if appropriate
• Provide the internal subcommittee's final recommendation regarding approval of the program