Radford University | Artis College of Science and Technology

To: Faculty, Staff, and Students in the Artis College of Science and Technology

From: Steven M. Bachrach, Dean

Date: March 27, 2026

Subject: Annual Dean's report (March 29, 2025 – March 27, 2026)

Please find here my report for the 2025-2026 academic year. It is an honor to serve as Dean of the Artis College of Science and Technology.

My report highlights areas that I have worked on over the past year. None of these accomplishments are possible without an excellent team. I am grateful to the Department Chairs/Directors and the members of the Dean's staff for their hard work. The success of the Artis College is due to the dedicated efforts of its faculty and staff; I thank each of you for putting our students first.

I want to especially thank all of our wonderful administrative assistants within the College for hekping me, Associate Dean Small, and David Horton while the Dean's office has been without an executive assistant.

I have listed accomplishments within the four assigned general expectations of the Deans. Many of these items fall within multiple categories. I have placed them where I believe their primary impact has been.

A) The role or the dean is to lead the faculty and staff of the college in developing and delivering educational opportunities of the highest quality possible for students, consistent with the mission of the College

1) <u>New curriculum</u>

The most consequential activities that the ACSAT Leadership Team engaged in this year dealt with curriculum revisions. In response to SCHEV's indication that programs that do not meet viability guidelines would be negatively assessed this year, I met with every affected department at the start of the fall semester. I urged the faculty to seize this moment, to take ownership of the enrollment problems each degree program has faced for many years, and act in an optimistic manner to control of their destiny – rather than leaving their program's future up to the whim of the SCHEV committee. I asked the faculty to soberly assess what has not worked within their curriculum – to consider the difficulties

within their courses, to take into account the average preparation of our incoming students, and to align the curriculum with the employment options that our students are taking upon graduating. I then stepped back, allowing the faculty to take their rightful place in developing their curricula. I kept abreast on the progress through the chairs and provided feedback and advice along the way.

I am very proud to say that the faculty in the four affected department each achieved an amazing accomplishment: a significant modification of the curriculum that is simpler for the student to fulfill, provides much more flexibility in scheduling and course selection, meets students where they are when they arrive at campus, and provides clear direction for students to achieve their career aspirations. And all of this was completed within the Fall 2025 semester! I believe that each new curriculum is a strong step forward towards establishing viable degree programs in the near future. My congratulations to all of the faculty!

I next describe some of the highlights of the new curricula.

a) Physics

The new physics curriculum has two concentrations. The first is a significant reduction in the course requirements for students who wish to become physics teachers. The physics faculty and I met with the faculty in Education and Dean Wallace to ensure that the revisions would provide an efficient pathway to state licensure. The second concentration provides guidance for students interested in three different career paths. The most innovative path is toward a career in science communication and outreach, which leverages our facilities (Planetarium, Earth Museum, Greenhouse) and programs (Science Days, Summer Bridge, BLAST). Both of these new concentrations are focused on employment options that we hope will attract new students. These changes have been approved by all committees and will be in effect Fall 2026.

b) Mathematics and Statistics

Similar to physics, the new mathematics and statistics curriculum provide course guidance for students centered on career outcomes. The key feature is a reduction in the number of upper-level courses needed to complete the degree, and tremendous flexibility in course selection, empowered by good faculty advising, to allow each student to construct a curriculum that will set them up for success upon graduation. Suggested curricula that focus on actuary, teaching, and decision science are provided to help students build their personalized curricula. These changes have been approved by all committees and will be in effect Fall 2026.

c) Geospatial/Earth

The Department of Geospatial and Earth Sciences have developed a single degree program to replace the current degrees in geology and in geospatial science. The new BS degree will have three concentrations: engineering geology, geospatial science, and environmental science. Synergies between the old, separate degrees have been identified, leading to streamlined curricula, shared resources, and more flexibility for students. This change requires approval by SCHEV, namely the deletion of the two old majors, and the creation of the new major in Geospatial and Earth Science. Documents for SCHEV are in development.

d) SCIS – DAIM and AI certificate and AI concentration

The School of Computing and Information Sciences has made the difficult decision to sunset the MS in Data and Information Management (DAIM) degree. Historically low enrollment and the changing landscape of computer science informed this decision. We will enroll students in Fall 2026 and submit the formal closure documents to SCHEV this year.

The School has developed a graduate certificate in artificial intelligence, with a focus on AI usage. In conjunction, the School has developed an undergraduate concentration in AI. Recognizing the growing role of AI, we anticipate that this concentration will be very attractive, especially as the proposed graduate certificate dovetails such that students can compete their BS and the certificate in five years.

2) <u>BS Applied Biotechnology</u>

The BS in Applied Biotechnology was approved by all internal committees and by the BOV in June 2026. The curriculum was developed principally by Jamie Lau, Christine Small, Sara O'Brien, Laura Link, and me. We solicited input from colleagues within ACSAT and the Waldren College, and from industry experts in Roanoke. The curriculum is unique within Virginia in focusing on the practice of biotechnology, including best practices, intellectual property, and regulatory processes. We completed the SCHEV documents and are awaiting input from Jessica Stiwell for submission this year to SCHEV. We hope to start the program, offered exclusively in Roanoke, in Fall 2027. See below for more details.

3) <u>Dual enrollment</u>

Four faculty within the Department of Biology were granted release time in spring 2026 to develop four courses for the dual enrollment certificate in biology (see below for how I developed the hiring plan to enable this). The Department plans to begin offering courses in the certificate in Fall 2026.

I participated, along with physics faculty, in the initial discussions with the Office of Graduate Affairs to develop a dual enrollment certificate in physics. We are continuing to work on a plan to develop and deliver this certificate.

4) Launched three GE committees

Working with the Leadership Team, we created three ad hoc College committees to address parts of the new General Education Curriculum. These committees are (a) define the science laboratory component, (b) develop the College's contribution to RAFD 101, and (c) develop interdisciplinary courses for the non-science major. All three committees have provided information to the University GE committees and are continuing their work.

5) New hires

The College had five vacant lines to consider in AY 2024-2025. We sought and hired two assistant professors in SCIS, both of whom started in Fall 2025 (Ali Mokhtari and Jesse Harden). We renewed Arinjoy Basak for a second one-year temporary position in SCIS. Both mathematics and physics faced uncovered classes for the year. My suggestion to the Leadership Team was to split a one-year temporary position between the departments, and the Leadership Team unanimously concurred; we hired Marco Brizzolara who started in Fall 2025.

When we decided to delay hiring the program director for the biotechnology program, I proposed that we hire a temporary faculty member for Spring 2026 in biology in order to provide release time for four faculty to develop courses for the DE certificate. This was approved and we hired Abby Bentley.

The College has six vacant lines to consider in AY 2025-2026. The Leadership Team discussed how to allocate these lines and unanimously agreed upon the following plan. We are currently searching for two assistant professors in SCIS, the program director (SP) for the applied biotechnology program, a one-year temporary instructor to teach biology courses at RUC, and a one-year temporary instructor to teach in anthropology. We also renewed the shared one-year temporary instructor for math and physics.

6) Mentor four new chairs

I consider mentorship for the chair to be an essential component of the role as Dean. This fall, we had four new people step in chair roles: Jake Fox in Anthropology, Laura Jacobsen in Mathematics and Statistics, Kim Lane in Chemistry and Christine Small as interim chair of Physics. Of these four, only Christine Small had previous chair experience, but that was in her home department of Biology. The returning chairs are all relatively new in their roles as well. I meet twice monthly with the Leadership Team, and once a month I meet individually with each chair. I have worked diligently to empower the chairs to manage their budgets and scheduling. I encourage all chairs to be strategic leaders and to consider the future of their department, faculty, staff and students, while recognizing the possible needs of other units within the College. All chairs have made major progress as leaders (including participation in some chair training conferences). I am especially proud of the quality of our discussions, the open exchange, the new ideas brought forward by everyone, and especially

impressed with how well they work together in pursuing the best interests of the College as a whole.

7) Mentor Associate Dean Christine Small

I meet on a regular basis with Associate Dean Christine Small. I include her on all aspects of the operations of the Artis College including budget, personnel issues (where appropriate), curricular development, community outreach, student support, and strategic planning. In addition to her role as Associate Dean, Dr. Small became the interim Chair of the Department of Physics starting in fall 2025. She has performed exceptionally well in all aspects of her jobs. Some highlights from this past year include:

1. **ACSAT Weekly Newsletter** – Developed a college-wide weekly newsletter to centralize and increase visibility of ACSAT events, in support of college community-building and student support / engagement efforts. The newsletter now reaches ~970 students, faculty, staff, and selected.

2. **RISE Community Action Team –** Co-led the Artis College RISE initiative with Dr. Kristina Stefaniak, focused on enhancing student sense of belonging, engagement, and academic support. Highlighted events include (a) Weekly Food for Thought / Common Student, (b) Science Expo 2025, (c) Paint & Plant and ACSAT T-Shirt Tie Dye, (d) Artis Common Student Hours, and (e) Radford Community Fest.

3. **College Completion Initiatives** –Represented ACSAT at the "Complete College America 2025 Annual Convening" in Baltimore, MD, in fall 2025. This conference led to the creation of the “Guided Pathways and Completion Initiative”, led by Drs. Jerel Benton and Riane Bolin. Together, these efforts are focused on university-wide strategies for student success, particularly clarifying advising and degree pathways and increasing student completion and workforce readiness for all students. I am serving as ACSAT representative on the new Guided Pathways initiative.

4. **Curriculum Development –** Contributed to college-level curriculum initiatives:

    1. **General Education science courses for non-majors –** Co-led an ad-hoc working group with Dr. Ben Caldwell to develop recommendations for General Education science courses for non-majors. The team developed recommendations for course design and learning objectives and will continue work to prepare proposals for college-wide science courses to support the new Gen Ed program in Fall 2027.

    2. **Interdisciplinary Environmental Science Program –** Collaborated to develop a proposal for a college-wide interdisciplinary Environmental Science major. While considerable progress was made on program design and

justification, the initiative has been paused as multiple departments undergo significant program revisions.

5. **Student Awards & Scholarships** – Coordinated college-level student award and scholarship selection. Worked with the ACSAT Awards Committee to review ~700 applications and recommend recipients for 25 Foundation Scholarships. Also coordinated ACSAT Outstanding Student and Faculty Awards and associated ceremonies with the ACSAT Leadership Team.

8) Onboard Juan Urista

Juan Urista became the HSC representative for the Artis College's students in Fall 2025. I invited him to a Leadership Team meeting to discuss his role and establish a working relationship. I invited him to attend the Friday Food for Thought to informally meet with students and faculty. We have also arranged for him to have an office in the Dean's Suite so that he can hold regular meeting hours in our building.

9) Teaching evaluation

Last academic year the Leadership Team forwarded a proposal to revise the teaching evaluation process. That proposal was not approved by the College's faculty in the spring, though it did garner more that 50% of the vote. The Leadership Team decided this fall to refer the proposal for consideration by each department to adopt whatever components they wish.

10) Annual evaluations and tenure and promotion recommendations

I submitted annual evaluations of all faculty, reappointment evaluations for all of the special purpose faculty and non-tenured faculty, and tenure and promotion recommendations for four faculty.

B) The role of the dean is to lead the College in procuring and managing fiscal, human, and physical resources necessary to accomplish the goals

1) New building in Roanoke

I participated in the selection process for the architectural and engineering firms that will design the new building in Roanoke. I have kept the faculty and staff, especially those at RUC, apprised of the building process throughout the year.

2) BAE/AEP SUPPORT

Working with David Horton, we secured additional financial support from American Electric and Power (AEP) for the Summer Bridge program. This proposal was for funds to support the first summer undergraduate student (Athena Smith) who both engaged in undergraduate research and assisted in delivering the programming for the 2025 Summer

Bridge program. We were also successful in securing support from BAE for the Summer Bridge and BLAST programs, and BAE just informed us that they are making a contribution towards the 2026 programs as well.

3) RARE reunion

In collaboration with Jon Zeitz, the College's advancement representative, and Dr. Jason Davis, we organized a reunion of the RARE program. The event was held on zoom on August 12, 2025, and a dozen RARE participants attended. It was a great evening of reminiscing about the RARE experiences, and served as our initial step to reconnect these students with the Artis College and Radford University.

4) Budget allocations

I continue to successfully fund all travel requests for faculty and for students. A key success of the College is providing the opportunity for students to attend and present at professional meetings. Using a combination of funding sources, including the OURS office, departments, and the College, all student travel was fully funded this year.

I encouraged the new chairs to seek professional development and was able to provide financial support so that Dr. Stockton Maxwell could attend the American Association of State Colleges and Universities (AASC&U) 2025 Department Chair Leadership Institute.

The College was successful in securing important new instrument acquisitions through ETF. In addition, I was able to advocate for additional equipment provided through one-time funds from Academic Affairs. This was the funding mechanism used to make the significant equipment upgrade needed for the Planetarium (see below).

Working with Adam Neal and Tracy Burcham, we were able to combine the departmental budgets that had been split across main campus and RUC. This has reduced the time need for budgetary oversight by eliminating redundancies.

C) The role of the dean is to represent the college, its goals and needs to other external as well as internal constituencies

1) Search for Dean CHBS

Last year I chaired the search committee for the Dean of the College of Humanities and Behavioral Science. Unfortunately, we did not hire anyone. Provost Usher asked me to chair the search committee again. The Search Committee evaluated over 50 applicants, conducted ten zoom interviews, and brought five candidates to campus. The search concluded with the hiring of Dr. Jeffrey Aspelmeier.

2) Summer Bridge and BLAST

The Artis College hosted the annual Summer Bridge program in July 2025 for rising senior high school students. David Horton again organized the program, drawing upon many faculty. This program continues to be supported in large part from generous grants from American Electric and Power.

We hosted our third BLAST program, a three-day camp for rising 9th and 10th graders interested in the STEM areas, through a grant from the Virginia Space Grant Consortium. David Horton organized the camp, and we will host the program again this summer.

3) Dean's Advisory Board

I continue the practice of meeting with the College's Dean's Advisory Board once each semester. The Board received a brief update of activities within the College and then participates in a "deep dive" discussion on a specific topic. The Board participated in a challenge for the online fundraiser event in December.

As an outcome of the deep dive discussion in Spring 2025, the Board encouraged the College to create a LinkedIn presence. Working with Jon Zeitz and David Horton, we created a LinkedIn page that now has over 100 followers, made up of faculty, staff, students, and friends. Regular posts appear on the page, keeping it fresh and informative.

4) RadSTEM podcast

Daid Horton initiated the College's RadSTEM podcast in fall 2025. Two episodes have been recorded and released; these feature Radford University faculty, students, and alumni, and relate how our research activities empower our students. David continues to work on new episodes. Episode drops are announced through a variety of social media, including on the College's LinkedIn page.

5) University committees

I continue to represent the Artis College on a variety of University-wide committees. These include Academic Policy and Procedures, Academic Affairs Leadership team (AALT), Roanoke Leadership group (RLG), and the President' Leadership Council. I represent the deans on the University Planning and Budget Advisory Committee (UPBAC).

6) Collaborations with VWCC

I have been the point of contact and facilitator for two collaborations with Virginia Western Community College.

a) We have begun discussions of using the biotechnology and chemistry laboratory spaces at VWCC to deliver the applied biotechnology laboratory courses when that program launches and before the new RU building is completed in Roanoke.

b) The Medical Laboratory Science faculty developed transfer agreements such that VWCC student who complete their AA degree in health science, biotechnology or medical laboratory technician can transfer the Radford and complete their BS in MLS. The key component of this arrangement is that these students can take their third year courses either at RU main campus or appropriate courses at VWCC in Roanoke. The signing of these transfer agreements is scheduled for late April 2026, with the possibility of students taking advantage of this new pathway as early as Fall 2026.

7) Renewal of RU/Southwest Virginia Governor's School arrangement

I facilitated a renewal of the agreement with Southwest Virginia Governor's School such that three courses (two in physics and one in mathematics) will continue to be offered as dual enrollment courses.

8) Appalachian College of Pharmacy

Working with Glen Mayhew, we facilitated a conversation with Appalachian College of Pharmacy (ACP) to develop an agreement for a 3+3 program. Students will take their first three years of study at Radford University in either chemistry or biology. After admission and matriculation to ACP, students will have their first year courses transfer back to RU and thereby complete their BS degree. After two more years of study at ACP, students will graduate with their pharmacy degree. Chairs Lane and Lau have completed the course equivalencies, which are now being reviewed at ACP.

9) CASE conference

I attended the Council for Advancement and Support of Education (CASE) Conference *Development for Deans & Academic Leaders* in November 2026. I joined my fellow deans and members of Advancement at the conference, which provided the opportunity for the group to collectively consider ideas and challenges in the advancement arena.

10) Microbiology changes in collaboration with nursing

Staffing of the microbiology lecture and laboratory course, especially for the nursing students, has become difficult given the increasing size of the nursing program. In conversation initiated by me and Jamie Lau, we collaborated with our Nursing colleagues, including Dean Downey, to explore the possibility of separating the lecture and lab components. Licensure within the Commonwealth of Virginia does not require students to take the microbiology laboratory. We have changed the microbiology course such that the lecture can be taken without the laboratory, drastically reducing the number of laboratory sections needed. This change better serves our students and provides more flexibility in staffing courses and course offerings within biology.

D) The role of the dean is to promote the overall excellence and welfare of the University

Many of the items discussed above also play into this expectation. Below I list three additional items whose impact is primarily within this category.

1) Teach-In for Academic Freedom and the Liberal Arts

In response to the higher education climate of the past year, and as a follow-up to the academic freedom panel in October 2026, I hit upon the idea of having a Teach-In that could involve the entire Radford University community in exploring what this means for us. I proposed the idea to the ACSAT Leadership Team, and receiving enthusiastic support, I then reached out to Deans Aspelmeier and Williams. They too were eager to support a Teach-In. With suggested participants from each of their Colleges and mine, I solicited faculty involvement to form an organizing committee. Over the past four months this committee has solicited suggested session topics from faculty, staff, and students. We now have a full program, and we are looking forward to an engaging set of discussions, panels, music, and posters on the afternoon of August 8, 2026.

2) Planetarium support

The planetarium in the Center for the Sciences is a creative space for student engagement and community education and outreach. The Department of Physics supports the planetarium, led by Dr. Rhett Hermann. Planetarium shows are scheduled throughout the year for the public, given by Radford student volunteers. In addition, planetarium shows are a major component of Science Days – visits by local K-12 schools.

The computer hardware that powers the planetarium is at the end of its lifecycle. We have experienced numerous temporary outages, and the most recent software update cannot be installed on our server. With the assistance of Adam Neal in the Provost's office, we were able to identify one-time funding that will provide for completely new hardware and allow the planetarium to remain a centerpiece of science community outreach.

3) Renaming the Science complex

Upon suggestion from the Provost, I collaborated with the Leadership Team on a request to rename the science complex of Reed Hall, Curie Hall, and the Center of the Sciences to just the *Center for the Sciences*. To a new visitor to the complex, it appears as one large building, and the three names can make navigation confusing. Additionally, emergency services have had difficulty finding their way to the correct location. Since neither Drs. Curie nor Reed have any connection to Radford University, and there are no donors affiliated with these buildings, the names Reed and Curie simply carry historical connotation. Their names on the walls of the interior will remain but all external signage and official designation will be

to the Center for the Sciences. This request is currently under consideration by the Naming and Commemorative Tributes committee.

This is my last report as Dean of the Artis College of Science and Technology. I have enjoyed working with all of you, and I wish you the best in your future endeavors.