



Center for Excellence in TEACHING AND LEARNING

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A Message From Our Director

Welcome to the 2021 winter edition newsletter from the Center for Excellence in Teaching and Learning (CETL). Reflecting on 2020, we are thankful for teachers! As the director of CETL, and along with the CETL staff, I am proud and inspired by how you have taken on the past year with resilience and grace. The last few semesters have been challenging, and we could not have made it through without the hard work you have put into creating positive learning experiences for our students. As we begin another new semester, we wanted to highlight and share the amazing work that the faculty and staff of Virginia Tech have done during the fall semester of 2020.

This newsletter will feature a segment on project-based learning (PBL) with our Associate Director for Strategic Initiatives and Educational Research, Liesl Baum, and an update from the Director of the Academy for Experiential Learning, Vicki Pitstick. A Q&A with David Gray, Associate Professor of Practice in Engineering Education, features how he has adapted to teaching during a global pandemic. This edition will also highlight our November and December Excellence in Teaching Award recipients. The CETL staff and I want to thank and recognize the hard work of faculty throughout 2020 and hope that your spring semester is off to a wonderful start.

Kim Filer | CETL Director, Associate Vice Provost for Teaching and Learning

Highlight: Project-Based Learning

Project-based learning (PBL) is a core piece of CETL's goal to advance research-based and student-centered instructional practices at Virginia Tech. This quarter, we spoke to Liesl Baum, Associate Director for Strategic Initiatives and Educational Research at CETL, to highlight the center's project-based learning mission and initiatives.

"At Virginia Tech, we're looking to scale the overall participation in project-based learning across the university to provide students with learning experiences that help them develop skills that they will need to tackle real-world problems," Baum said. "The efforts through our office will help faculty scaffold students through the development of critical skills within their disciplinary focus and develop the ability to seamlessly engage with people, knowledge, and skills beyond their disciplines."

Baum further described some of the major components of our PBL efforts:

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Liesl Baum | Associate Director for Strategic Initiatives and Educational Research, CETL

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"We are very excited to partner with Worcester Polytechnic's Center for Project-Based Learning to annually offer the Project-based Learning Institute, delivered at Virginia Tech at the beginning of the summer. The institute is a multi-day event designed to educate cohorts of faculty on the tenets of authentic project-based learning, provide an opportunity to consult with PBL experts, develop a plan, and identify resources needed to support their efforts. The partnership with WPI will enhance our efforts with PBL and provide expert-level programming to Virginia Tech faculty."

"In the fall semester, we will create an opportunity for institute-participating cohorts to report on progress, milestones, challenges, pivots, etc. Other Virginia Tech faculty will be invited to join the conversation and use that time to learn from other teams, ask questions, and be presented with tools to determine if project-based learning is appropriate for their goals and efforts. The growth of this community will be important to our university-level efforts."

"Finally, as we continue to build the community of faculty engaged in project-based learning, we will work with cohorts to develop a plan for determining the effectiveness on student learning and student experiences. We will tie this work into our efforts aimed at the scholarship of teaching and learning, helping these cohorts develop a research agenda and finding ways for the faculty to report on, and publish around their efforts in PBL with the intention of informing the broader teaching and learning community on the impact of PBL."

As we look ahead at CETL, we hope to generate a strong network of Virginia Tech faculty engaged in PBL and really strengthen our portfolio of teaching through this strategy. As we expand our project-based learning mission at CETL, we endeavor to tie our work into national networks and engage our campus in larger conversations about PBL in higher education. We are working to become a model for other colleges and universities.

The 2021 WPI@VT Project-based Learning Institute will be held virtually on June 1-3. Applications remain open until March 1.

Apply here: https://forms.gle/y95PuLAMP7Ta3iDm8

Excellence in Teaching Awards

Each month, the center recognizes a faculty member for effective, engaged, and dynamic teaching approaches and achievements.



Our November awardee, Dean Stauffer, keeps student strengths at the forefront of his teaching in the Department of Fish and Wildlife Conservation.

Read the full story.



Our December awardee, Ariel Ahram, supports students in challenging their perspectives in the School of Public and International Affairs. Read the full story.

The 13th Annual Conference on Higher Education Pedagogy Feb. 3 - 5, 2021

Registration is open!

For more information: https://chep.teaching.vt.edu

Register here:

https://register.cpe.vt.edu/portal/events/reg/participant TypeSelection.do?method=load&entityId=3619297



An Update from the Academy for Experiential Learning

The Academy for Experiential Learning had a busy fall semester. Our first three pilot departments - which included chemistry, sociology, and political science - presented three town halls to the campus community in October and November to explain how they are moving toward incorporating a bridge experiential learning requirement as a part of their curricula.

This spring, the academy will be working with four departments in the College of Engineering as they think through how to add this component to their curriculum as well.

Departments interested in engaging in the program for the 2021-22 academic year can contact the Director of the Academy for Experiential Learning, Vicki Pitstick, at vickip@vt.edu.

To gain valuable input from a variety of stakeholders, the academy began convening various committees.

The Student Advisory Committee, Opportunity Providers Committee, and an Operations Team met throughout the fall. The committees will assist academic departments by giving important perspectives, resources, and best practices related to experiential learning.

In addition, the academy began providing development opportunities for faculty during the fall semester. These efforts will continue in the spring and will include a book club; Experiential Learning Spotlight Sessions that will feature partner campus departments who provide valuable ways for students to participate in experiential learning in and out of the classroom; an Experiential Learning Certificate Program; and workshops on different topics associated with experiential learning.

For a complete list of all the experiential learning programs being offered for spring, please visit teaching.vt.edu/programs.

Vicki Pitstick | Director, Academy for Experiential Learning

What's New in Teaching?

Faculty Q&A with David Gray



Dr. David Gray of the Department of Engineering Education spoke to us about what he learned from his experience teaching in the fall.

Pictured: David Gray, teaching on Zoom from the lab, displays his iconic mustache while masking for safety.

What was teaching like for you during the fall 2020 semester?

This question comes to me as I am wrapping up the fall 2020 semester. I am teaching four sections (two courses), and I have 15 undergraduate research students working on six different projects, on top of advising several student organizations at the university. So, hard. This semester has been hard.

One of my main motivations in teaching is in the mentoring relationship I enjoy with the students—those in my class, and those I mentor in student organizations or undergraduate research. This semester, that mentorship has been much more difficult to maintain. Additionally, I have been overwhelmed this semester at the amount of work that I am tasked with. Even the smallest of tasks requires so much more effort than during a typical teaching semester. For example, having students pair and share in a class requires making a breakout room in Zoom, making sure that each student has a partner, resolving the inevitable issue of when a few students drop off the call for poor internet connections, etc. But, as always, there are rewards. I've 'met' many new students through my Foundations of Engineering course, and I've seen some amazing innovation through my Create! course, and through a Design Thinking ImpACCt project with some sister universities within the ACC.

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And, thanks to continued support from the CETL experiential learning grant, I've had the opportunity to watch the undergraduate research students grow their technical and professional skills. My students have continued to work remotely on our projects, and have made some amazing technical strides, pushing the research into areas beyond my expertise. So we are all on some exciting, albeit scary, territory.

What projects or teaching strategies have got you excited right now?

I am thrilled about the undergraduate research projects my team is taking on. The technical aspects are very exciting - from developing a laser-based optical interferometer in the Damage Sciences Lab in Norris, to making the first steps in a machine-learning algorithm to control a home thermostat to modeling the magnetic response of elemental gadolinium and validating material properties using empirical data. My students have really pushed the envelope of their projects, and have done so without any face-to-face interaction with

I am also very excited about the growth of my students. I get to see much more firsthand what the undergraduate researchers are up to, since they interact with me on a more intimate level.

What have you learned about your students from these experiences, and about yourself as a teacher?

I think this semester the students have reaffirmed my confidence in their character and ability. My undergraduate research students have expanded into the space I have created for them, taking on projects and personnel management of their teams in a way that is astounding. I know that Virginia Tech admits the finest students, but it is comforting that students reinforce this through the quality of their work and their actions. I have learned a few things about myself. I have really come to appreciate the power of space and collaboration. Virginia Tech is excellent about making a space where people can come together and work, whether they are faculty, staff, or students. Often, when these circles overlap, some of the finest creativity blossoms. I am learning how to better select amongst the myriad of choices placed before me in the privileged position of Associate Professor of Practice. I am learning to search out synergies within organizations, faculty, students, and institutes. I am learning more about why I enjoy this job, with all of its challenges and opportunities.

Spring 2021 Workshops

Feb. 9 - Implementing Small Changes in Your Teaching for Big Results - 2:30-4 p.m.

Feb. 17 - Planning for Research on Your Teaching: The Value, Process, and Impact of SoTL - 1:30-3

Feb. 19 - Enhancing Student Engagement in Synchronous Online Courses - 10-11:30 a.m.

Feb. 19 - Experiential Learning Spotlight Session: Venture Out - 1:30-3 p.m.

Feb. 22 - Improving Peer Review and Evaluation in Your Courses - 2:30-4 p.m.

Feb. 23 - Designing and Evaluating Student Presentation Assignments - 9:30-11 a.m.

Feb. 24 - Leveraging Peer Mentors and Teaching Assistants to Create and Maintain Engagement and Community in Your Courses -10-11:30 a.m.

Feb. 26 - Why Experiential Learning is an Access & Equity Issue - 2-4 p.m.

Mar. 3 - Student Voices: Creating Engagement and Community in Class - 2-3:30 p.m.

Mar. 31 - The Role of Faculty Mentorship in Experiential Learning - 2-4 p.m.

Apr. 9 - Experiential Learning Spotlight Session: The On-campus Internship Program - 10-11:30 a.m.

For more information and to register, visit https://teaching.vt.edu/programs/workshops.html



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Stay up to date with the Center for Excellence in Teaching and Learning on our Facebook page! We post weekly updates on programs and upcoming events. We also share helpful teaching tips every Tuesday in a fun, video format. If you have any teaching tips you would like to share, please email ava3@vt.edu to be featured in one of our videos and boost our teaching excellence at Virginia Tech. Be sure to give our Facebook page a follow at <u>TeachingVT</u>! We are excited to use this platform to engage more with you.





