

TIDES Experiential Learning in CNS

A. Establish a set of experiential learning (EL) student outcomes.

- Under close collaboration with experts, students apply skills and techniques that they have learned in the classroom to relevant and engaging problems.
- Students think critically and creatively to solve problems about topics they find interesting.
- Students are exposed to tools of the trade (where “trade” may include research).
- By seeing how their knowledge and skills are useful, students are motivated to continue in their major and to subsequently pursue a career in the major field.
- Students refine their communication skills along various dimensions, including written communication, oral presentations, and one-on-one and small group discussions.
- Students learn to solve problems independently.
- Students thoughtfully reflect on their educational experiences to understand how these experiences have built their knowledge and skills.

We intend to develop a long-term research and evaluation plan with Dr. Shelly Engelman in TIDES to measure the impact of our efforts on student learning and experience within CNS.

B. Require all CNS students to complete at least one immersive EL activity aimed at meeting a subset of defined learning outcomes.

TIDES Goal: Immersive EL opportunity for <i>almost</i> all CNS students: determine EL opportunities currently available to CNS students, and fill these with current students, and create additional EL opportunities.	
Research Placement Mixer	<i>Connect undergrads with research groups seeking students</i>
CNS 2 nd Year Excellence awardees	<i>Connect high achieving sophomores with faculty mentors</i>
Inventors program	<i>A 1-2 semester long experience where students collaborate in multidisciplinary teams to solve real-world industry related problems. Representatives of industry-partners submit problems and provide advice and support to students.</i>
Expand student consultations	<i>Provide more 1-on-1 consultations with students who are seeking EL opportunities across campus</i>
CNS honors meta-course	<i>Teach 1/3 of UGS Honors Signature course with the goal of placing some freshmen honors students directly into PI research groups. Idea is to free up seats in FRI to accommodate freshmen on the FRI waitlist that would otherwise not have been able to participate in FRI.</i>
Expand FRI availability	<i>Looking for scalable models for FRI expansion. Targeting faculty writing NSF CAREER grants. Pilot testing new mega and interdisciplinary stream format. Exploring corporate funding models with ConocoPhillips.</i>
Rethink and expand internship programs	<i>Meet with coordinators/directors from departments that offer internship programs and community practicums. Discuss strategies that reduce barriers that prohibit some of their majors from participating in a program they desire (eg, offering more credit for summer internships to enable access to financial aid).</i>

Partner with ACC BioSciences Incubator	<i>Piloting a program where several select CNS students will receive funding to participate in rigorous and authentic training at the ACC BioSciences Incubator, providing them a pipeline into startup internships within Austin.</i>
Science & Inventors Sprints	<i>One day immersive EL activity focused on science research or inventing some product.</i>
Track student participation	<i>Develop a systematic method for tracking CNS student participation in high-impact EL opportunities.</i>

TIDES Goal: Expand funding to support access to high-impact EL opportunities.

Summer Enrichment Endowment	<i>Dean Goldbart is seeking \$50 million in endowment funds to support high- needs students in EL opportunities (~500 per year) such as summer internships/research. Will have begun developing plan to organize and execute this mission.</i>
Texas Excellence in Jobs and Service (TEJAS) award	<i>TEJAS provides funding for 25 students qualifying for financial aid to participate in research activities (similar to work-study). Develop a professionalism seminar course that provides community and support to maximize research experience.</i>
S-STEM Grant	<i>Scholarships to support 25 sophomore students of high-need in FRI. They will serve as peer mentors, and must enroll in a seminar course on professionalism.</i>
International Sprints	<i>Received \$50K in funding to support up to 3 Global Learning initiative teams.</i>

C. Encourage broad implementation of experiential learning within the classroom, giving students frequent exposure to experiential learning as part of their standard undergraduate coursework.

TIDES Goal: Every CNS department will infuse EL practices within enough of their traditional courses such that at least 50% of their majors have exposure to EL in addition to the immersive EL opportunity above.

TIDES Summer Course Design Institute	<i>TIDES facilitates a multi-day workshop held 3x per year, designed to teach faculty best practices in course design and pedagogy. Proposals that incorporate substantial EL are eligible for funding to support their participation at the Course Design Institute.</i>
Partnering with the Provost's Experiential Learning Initiative (ELI)	<i>Helping ELI staff identify CNS faculty to be EL Ambassadors or EL course developers (receive funding to design EL-based courses). These faculty will also attend the TIDES Course Design Institute, and receive additional coaching and support on course design.</i>
Develop EL faculty-facing resources	<i>Develop repository of EL resources and ongoing practices in CNS and make these available on the TIDES website.</i>
Provide 1-on-1 support for faculty	<i>Consult with individuals or faculty teams and provide coaching for creating EL curriculum for their courses.</i>
Create EL guides	<i>Prepare and share guides providing strategies for implementing EL into any existing course.</i>

Create EL contracts for learning for students and faculty	<i>Generate “learning contracts” that aim to standardize the learning outcomes and experience of students participating in EL across CNS.</i>
Identify current EL occurring in CNS and create a CNS community of EL practitioners	<i>Identify individual CNS faculty currently implementing and begin to build a community of CNS faculty using EL in their courses. Invite these faculty to share their ideas with other faculty. Connect faculty from across CNS interested in observing and learning more about EL currently occurring.</i>
Increase EL in introductory labs	<i>Explore the opportunities for infusing more EL into introductory teaching labs required of most CNS students.</i>
Discovery day/dinner theme = EL	<i>The theme for this year’s Discovery Day and Dinner will focus on EL.</i>

TIDES Goal: Develop a comprehensive infrastructure for collecting and making visible EL opportunities in CNS to students.

TIDES EL Resources Portal	<i>Online repository for students of EL opportunities, and tips for finding EL placements.</i>
Develop a strategic communication plan	<i>This item still requires flushing out.</i>
Student EL video competition	<i>Students submit short videos describing EL opportunities they have participated in. They are ranked and presented at the Undergraduate Research Forum. The first round of videos will be submitted this coming year.</i>
Student EL newsletter column	<i>Create a column or section of student EL experiences to be included in newsletter coming out of David Vanden Bout’s office.</i>
Tips for students & parents	<i>Create webpage outlining the importance of participating in EL opportunities that is accessible to both students and parents.</i>
CNS EL roadshow	<i>TBD</i>
Recent graduate EL speaker series	<i>TBD</i>

D. Additional goals.

TIDES Goal: CNS at UT will be known as an influencer in the higher education EL community.

Begin attending, and presenting at national conferences focused on EL	<i>For example: National Society for Experiential Education. Association for American Colleges and Universities.</i>
Apply for and win EL program awards	<i>For example, NSEE program award.</i>