

PROGRAM REVIEW IMPLEMENTATION PLAN
ANNUAL PROGRESS REPORT
Natural Resources and Environmental Science Program 2021-
2023

Recommendation 1. Encourage the active engagement and commitment of students, alumni, and stakeholders in the NRES program. (CAFE SP Goals 1 & 5)

Assessment method: Continue the student peer mentorship program, encourage student participation in NRES-related student organizations, and engage alumni.

Results: We have continued the College Welcome event for entering freshmen every fall along with alumni events in conjunction with the Internship Forum. There is good representation of NRES students on the University of Kentucky Student Sustainability council (SSC).

Analysis of results and reflection: The student-centered welcome event has continued to serve as a mechanism to connect upperclassmen with entering freshmen and transfer students. The upperclassmen were involved in exercises which included a question and answer session in both speed-dating and panel formats for the incoming class. Relationships were developed and older students were effective at mentoring the new students, based on the flurry of questions from the new students. Internship Forums have been held each semester where students present posters and alumni are invited along with keynote speakers to encourage student-alum-faculty interactions. One notable speaker was Greg Abernathy, Executive Director of the Kentucky Natural Lands Trust and one of the first graduates of the NRES program. Students from the NRES program have been very involved in the UK SSC where they interact with students from other environmental programs (ENS) across campus.

Ongoing improvement actions: We are in the process of updating our alumni and stakeholder database to improve our ability to engage these groups (see recommendation below) by working with the CAFE Office of Alumni and Philanthropy. We also hope to build on the Welcome event and future Internship forums in order to get our undergraduates involved with alumni and stakeholders providing a sense of community among the NRES program.

Recommendation 2. Expand and enhance communication strategies (CAFE SP Goals 2 & 5)

Assessment method: Integrate website content with the Newsletter and social media.

Results: The NRES program recently hired a new academic coordinator (Dr. Hannah Angel) who is working with paid undergraduate student assistants to overhaul the program website, including the social media platforms, and communicate regularly using the Newsletter. The Newsletter has published invited editorials from alumni and presented alumni profiles. Facebook is employed by students during the summer field experiences (NRE 320) to post about experiences.

Analysis of results and reflection: The improved NRES website has strengthened our ability to

communicate with current students and alums. The invited editorials from alumni in the newsletter have been a nice platform to share what alumni are doing in the field and have benefitted our current students. As part of the website overhaul, we included a 'give to the program' link.

Ongoing improvement actions: We will continue to update the website, including an up-to-date list of possible internship opportunities and faculty profiles. This will alert students of possible internships and research experiences which are typically emailed by the AC to the student listserve. There is also a need to better integrate aspects of the program in the NRES Facebook site, beyond the NRE 320 field experience, to communicate information to students. We will also explore the possible expansion of using LinkedIn as a means of communicating regularly with our alumni.

Recommendation 3. Expand alumni engagement and philanthropic efforts (CAFE SP Goals 2 & 5)

Assessment method: Complete the NRES alumni database and work with CAFE Office of Philanthropy to enhance fundraising opportunities and engage alums.

Results: Through the efforts of Dr. Mary Arthur as alumni connections coordinator, Dr. Larry Grabau as Director of Undergraduate study, and Dr. Hannah Angel as academic coordinator, an updated and accurate alumni database has been established in collaboration with the CAFE Office of Alumni. Initial results showed that there were ~600 alumni between the two sources. The AC, DUS, and Chair met with the CAFE Office of Philanthropy to create a fundraising digital 'ask' for donations to the program. Per the recommendation of the Office of Alumni and Philanthropy, we deployed two separate digital asks in 2022 and 2023. This raised \$1,800. As mentioned above, we include a 'give' link on the website. In addition, we organized an alumni reunion at Floracliff Nature Preserve in September 2023. Roughly 20 alumni attended the event and it allowed an opportunity for alums to engage with current students as we hiked one of the trails.

Analysis of results and reflection: Having accurate contact information for NRES graduates from the program in an updated database is helpful to maintain communication with alums. Furthermore, in a recent survey taken by the program, alums indicated that they would be interested in serving as a mentor for current students.

Ongoing improvement actions: Based on the results of the fundraising letter, we will develop a plan to encourage alums to donate to the program. The updated alum database will be useful to communicate what current students are doing. We will continue to invite alums to attend the internship forums in the fall and spring semester in order to afford them opportunities to mentor current students.

Recommendation 4. Establish a Stakeholder Advisory Board (CAFE SP Goals 2, 3, & 5)

Assessment method: This recommendation was not addressed.

Results: This recommendation was not addressed.

Analysis of results and reflection: No progress has been made in addressing this recommendation.

Ongoing improvement actions: In light of the updated alumni database, the plan is to use it as a guide in moving forward to work on this recommendation.

Recommendation 5. Diversify and increase financial resources for the NRES budget (CAFE SP Goals 3 & 5)

Assessment method: Perform an evaluation of possible funding sources for the program, including the use of updated alumni database where philanthropic initiatives will be deployed.

Results: As mentioned above, after firming up the alumni database, we deployed the first digital ask resulting in \$1,800 to our enrichment fund in collaboration with CAFE Office of Philanthropy. The SC chair met with the Associate Dean for Instruction (ADI) to evaluate whether revenue could come back to the program via the net tuition revenue (NTR) model. The NRES enrichment fund account was included as a QR code on the fall 2022 newsletter and on the website.

Analysis of results and reflection: It was encouraging to receive a positive response from the first digital ask, targeted towards supporting students for the Robinson Forest summer field experience (NRE 320). After meeting with the ADI, it appears that no revenue will be returned to the NRES program via the NTR model despite the upward trend in growth.

Ongoing improvement actions: We will continue to assess creative ways to increase financial resources for the program.

Recommendation 6. Enhance and implement the existing (and excellent) DE&I plan (CAFE SP Goals 4 & 5):

Assessment method: Begin initial steps towards enhancing DE&I within the NRES program.

Results: Chris Shepard, SC member, and Larry Grabau (DUS), spearheaded a proposal to the National Institute of Food and Agriculture Higher Education Challenge grant program to improve Diversity, Equity, and Access in Undergraduate instruction in Natural Resources.

Analysis of results and reflection: While this grant was not funded, it allowed the chair and SC members to reflect on ideas of how to encourage participation of underrepresented minorities in the natural sciences.

Ongoing improvement actions: We plan to continue to work on this recommendation.

Recommendation 7. Invest in infrastructure (personnel and physical facilities) (CAFE Goals 5 & 6)

Assessment method: Identify new physical space for the AC in the CAFÉ Office of Student Success.

Results: The office for the NRES AC (Hannah Angel) was relocated from the Equine suite to the CAFÉ Office of Student Success where other ACs are housed. This new space is ideal for interacting with students and other staff. There is still shared storage space for NRES in the Thomas Poe Cooper (TPC) building for equipment.

Analysis of results and reflection: The new space is ideal for interactions of the NRES AC with other ACs from interdisciplinary programs and with current students and prospective students.

Ongoing improvement actions: If the program continues to grow, we will need to identify more storage space to accommodate equipment as the closet in TPC is finite.

Recommendation 8. Facilitate new input on the NRES Steering Committee (CAFE SP Goals 3 & 5)

Assessment method: Increase the number of faculty and/or staff on the SC, including a representative from Extension and from a non-Memorandum of Understanding (MOU) department.

Results: Seven new individuals have been added to the NRES SC from four different departments, including Forestry and Natural Resources (FNR), Landscape Architecture (LA), Geography (GEO), and Philosophy (PHI).

Analysis of results and reflection: Dr. Liang Liang from GEO, a non-MOU department, and Drs. Jian Yang and Sybil Gotsch from FNR, recently accepted invitations to serve on the SC. Drs. Yang and Liang bring GIS-related experience back on the SC. Laurie Thomas, an Extension staff member in FNR, also began service on the SC to bring Forestry-related experience to the program. Jordan Phemister, a lecturer in the LA department, joined the SC and brings experience in making connections between the built environment and human health. Kenton Sena, a lecturer in the Honors program, and Bob Sandmeyer, faculty in Philosophy, have also accepted invitations to serve on the SC.

Ongoing improvement actions: Will continue to intensify efforts to broaden representation on the SC, including underrepresented minority faculty, in light of the growing enrollment.

Recommendation 9. Continue NRES curriculum innovation efforts, including the opportunity to create a 4+1 program (CAFE SP Goals 1, 4, & 5).

Assessment method: Evaluate the frequency of course offerings for required NRE courses and perform a curriculum revision to account for changes in core courses (CHE,

MA, STA), as well as an expansion of options for the GIS requirement. In addition, we intend on creating a climate change-related emphasis area. Submit paperwork for creation of a University Scholars Program (USP) with the Integrated Plant and Soil Science (IPSS) graduate program.

Results: Due to enrollment growth in the program, we offered NRE 201 (intro course) and NRE 471 (Capstone) both semesters which has been well-received by students. The chair has taught the fall section of NRE 471 and the AC has picked up the spring section of NRE 201 which is geared towards transfer students (while the fall offering is for entering freshmen). The first phase of the curriculum revision was approved. The USP with the IPSS program was approved and is now active.

Analysis of results and reflection: The first phase of the curriculum revision which was approved involved the addition of CHE 109/110 as a slower paced option to CHE 105. It also added MA 109 to our current suite of math choices (MA 123, MA 113, and MA 137). STA 210 was officially added as an option to the current required STA 296. Lastly, the first phase allowed FOR 330 and GEO 309 as parallel options to the currently required NRE/LA 355 to satisfy the GIS requirement. Due to the retirement of the DUS (Larry Grabau), the chair has taken on these duties which has slowed the development of phase two of curriculum revision which is the creation of a climate-change and energy emphasis areas.

Ongoing improvement actions: Will continue working toward creating the climate change and energy emphasis areas as part of the curriculum revision in the next cycle.