OSCE Faculty Evaluation Packet

Natalie Mountjoy, Department of Biological Sciences
Academic Year Under Review: 2024-2025

Overall Workload Expectations

As pedagogical faculty, my expected workload was mostly teaching (78%) and included my large lecture course (BIOL 122) as well as lab management (BIOL 121 and BIOL 123) in both the fall and spring. It also included coordination of several internships as BIOL 369s (BioCoaches and Patient Coordinators) both terms, and a team-taught BIOL 397 Science Process in F24. My service workload (22%) mostly comprised my work on Departmental and College Committees.

In review of my expected workload (Figure 1), I would like to address a few changes. Most importantly, I did not teach BIOL 122 in S25 and instead developed and taught a new hybrid graduate course: Conservation Ecology 575, section 001 online (N=17) and section 750 in-person (N=2). In both F24 and S25, I coordinated nine sections of BIOL 121 and eight sections of BIOL 123 (vs. 11 and 9, respectively). I supervised 4 undergraduate research students (vs. 3). Additionally, I chaired the last year of 1 in-person graduate thesis student.

In terms of service, I served on five graduate thesis committees (not listed) and served as the research advisor for two online graduate students (not listed). The departmental committee structure changed in F24, and I was a member of the Progression Committee and chair of the Recruitment Committee (vs. DEI, Advising, and Retention). I no longer serve on the Pre-Professional Committee; however, I continued to consult and write recommendation letters for 2 pre-vet students, 2 pre-dental students, and 4 pre-med students. Additionally, I served on the Provost Review Committee and Ecologist Search Committee (paused), and I now serve as a Science Advisor to the Western Kentucky Botanical Garden (vs. Board Membership).

I carry no research workload perse (0%), however, I do conduct pedagogical, clinical, and ecological research. Please see the list below for major projects in the year under review.

Name			Natalie Mountjoy							
Teaching						**Research**		**Service**		
Course	Cr Hour	enrollment	Term	% effort	comments	Activity/Expected outcomes	% effort	Activity/Expected outcomes	% effort	
BIOL 121 Lab Coordinator	1 X 11 sect.	275	Fall 2024	8	Coordinator	NA (although Dr. Mountjoy produces research outcomes)				
BIOL 122/H	3	114	Fall 2024	12	large lecture + HEEC			Advising Committee member	3	
BIOL 123 Lab Coordinator	1 X 11 sect.	275	Fall 2024	8	Coordinator			DEI Committee	3	
BIOL 397	3	12	Fall 2024	10				Biology Retention Committee	3	
BIOL 369/Patient Coord	3	10	Fall 2024	4	co-taught					
BIOL 369/Learning TAs	1	10	Fall 2024	1						
								OCSE Retention Taskforce	3	
BIOL 121 Lab Coordinator	1 X 9 sect.	225	Spring 2025	7	Coordinator			Science Advisor to WKHL/MCH	1	
BIOL 122	3	114	Spring 2025	12	large lecture			Board of Directors, WKBotanical Garden	1	
BIOL 123 Lab Coordinator	1 X 9 sect.	225	Spring 2025	7	Coordinator			Biology Student Advisor/Pre-professional committees	8	
BIOL 369/Patient Coord	3	10	Spring 2025	4	co-taught					
BIOL 369/Learning TAs	1	10	Spring 2025	1						
			Number	% effort						
Undergraduate research students			3	3						
Honors thesis supervision			1	1						
Graduate thesis supervision			0	0						
Other teaching related activities										
Total Teaching effort				78		Total Research effort	0	Total Service effort	22	
Total effort	100									
See OCSE workload overview document for % effort guidelines										

Figure 1. F24-S25 workload agreement

Teaching 78%

Teaching Productivity. I taught one large lecture of BIOL 122 with an additional section of BIOL 122 Honors embedded in F24. I continued to coordinate both the BIOL 121 and BIOL 123 labs, which require weekly TA meetings and prep work. My BioCoach course (BIOL 369 Learning Assistants) was offered again in the F24 and S25, and I ran the Patient Coordinator internship with Med Center (BIOL 396 PCs) along with Dr. McElroy in the fall and spring as well. I continued co-teaching our science-process course on clinical research, with Dr. McElroy, BIOL 397, and chaired the completion of an honors project based on a BIOL 397 project this spring (Alexandria Anderson). I supervised a BIOL 399 student in F24 investigating the drivers of bacterial and fungal root endophyte community structure. In S25, I supervised 2 BIOL 399 students on a new project assessing the success of stream restoration efforts with Beaver Creek Hydrology at Goose Creek in Hestand, KY. I also supervised another BIOL 399 student investigating student misconceptions regarding climate change. In S25, I created and taught a new hybrid graduate course, Conservation Ecology (BIOL 575, sections 001 and 750).

Table 1. Teaching productivity in F24-25. Total N=995 (taught, managed, or supervised) with 1257 SCHP.

Fall	CHs	Sec	N	Spring/Su	CHs	Sec	N
BIOL 122	3	1	74	BIOL 575 (001)	3	1	17
BIOL122H	3	1	23	BIOL 575 (750)	3	1	2
BIOL 121	1	9	231	BIOL 121	9	9	239
BIOL 123	1	8	196	BIOL 123	8	8	167
BIOL 369 LAs	1	1	13	BIOL 369 LAs	1	1	10
BIOL 369 PCs	3	1	6	BIOL 369 PCs	1	1	5
BIOL 397	3	1	8	BIOL 399	1	1	3
BIOL 399	3	1	1				

Quality Teaching. Quality teaching is my primary goal. I work very hard to ensure all my students have the opportunity to grow and be engaged in my classroom. My mean evaluation scores on SITES were higher than both Ogden and the Department of Biological Sciences for BIOL 122 in F24 (mean of 4.59 across all metrics vs. 4.24 for Ogden and 4.20 for the department) and for BIOL 575 in S25 (mean of 4.73 across all metrics vs. 4.31 for Ogden and 4.27 for the department; Figures 2 and 3). My performance was highest on questions regarding overall effectiveness and effective style, helpfulness, enthusiasm, and use of relationships and figures. Selected student comments from SITES are available in Figure 4, with additional comments from a separate student survey for BIOL 575 in Figure 5.

In terms of professional development, I underwent Blackboard Ultra Training in F24, and attended the WKU-PD Day and the Biology Leadership Conference (BLC) in S25. I was also a presenter at PD Day and I presented on my misconceptions research at the BLC (a national conference), both orally and as a poster.

I was nominated for CITL Teaching Honors for 24-25, and I have been nominated for this honor every year since F20. 94% of these nominations included notations that I create a challenging but exciting learning experience and effectively use technology and instructional resources. Another 75-90% cited that I engage and promote learning, reach out to students who are having difficulty, and use novel teaching styles, techniques, or approaches. In S25, I received the Alpha

Xi Delta Faculty Member of the Year award. Since beginning my career in the Department of Biological Sciences, I have been selected for many Greek Week Faculty Awards, and received the Junior Ogden Teaching Award, the Ogden College Faculty Teaching Award, the Center for Innovative Teaching and Learning (CITL) Honor Award and the WKU Teaching Award, as well as other teaching honors (as listed on my CV).

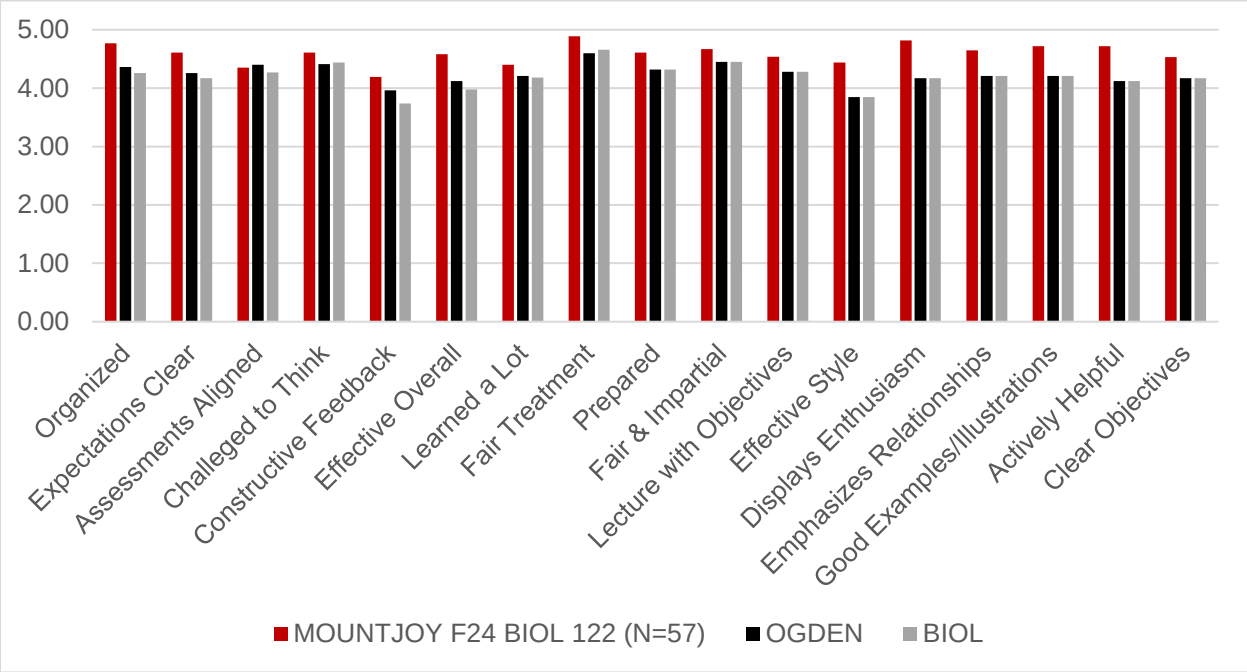

Figure 2. F24 BIOL 122 SITES item scores (N = 57) with Ogden and Department of Biological Sciences (BIOL) comparison.

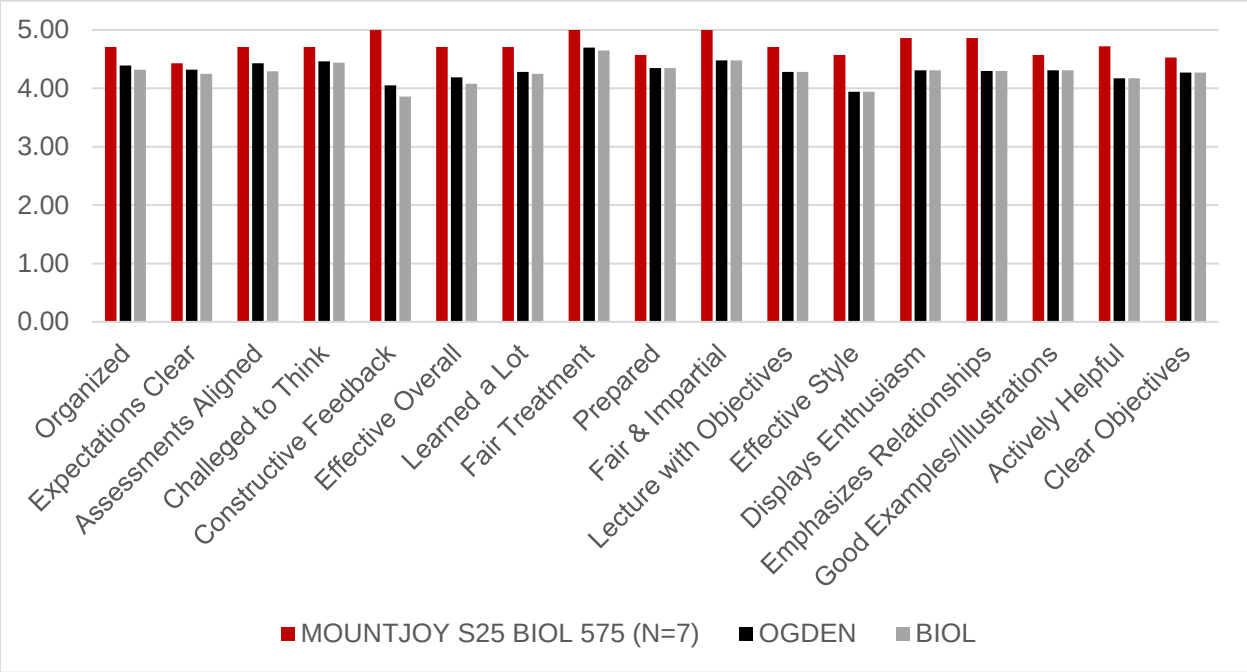

Figure 3. S25 BIOL 575 SITES item scores (N = 7) with Ogden and Department of Biological Sciences (BIOL) comparison.

BIOL 122 SITES

- love this course, she was very patient with students who were struggling with evolution due to how their high schools failed to teach it.
- The professor genuinely seems to enjoy teaching and she makes sure everyone understands each topic. She constantly emphasizes when her office hours are and will always stop to answer questions before, during, and after class.
- Dr. Mountjoy is an incredible professor who truly cares about her students. She has given me constructive criticism on all of my assignments to allow me to better understand the content and grow intellectually as well as personally. She is not only a very knowledgeable professor who understands how to make information digestible for students, but she is understanding to student needs and gives us patience and grace when we are struggling inside and outside of her class. I would love to take her again for any science course and coming from someone who has never liked science previously, that is saying a lot.
- I had a hard time adjusting to WKU at first and missed my home high school. However, this class gave me something to look forward to, and I truly enjoyed every lecture.
- For some reason I could not grasp the material and be prepared for the exams correctly. I studied but the way I did or what I studied wasn't enough. Wish there was maybe a study guide to narrow down the information on what to study. Good teacher tho and I enjoy biology.
- This class is extremely difficult content wise, but Dr. Mountjoy's enthusiasm and personability makes it a more enjoyable time. I really appreciate how she mixes assignments, class discussions, and lectures into her course. It breaks up the normal lecture style in these larger courses.

BIOL 575 SITES

- I know this is Dr. Mountjoy's first time teaching this class. I think she has done an exceptional job with the hybrid model and flexibility. I appreciate all of her thought into the course and teaching me new concepts even though I went into it thinking I already knew a good bit.

Figure 4. Selected representative student comments from 24-25 SITES.

BIOL 575 Separate Survey

- I enjoyed every aspect of the class. Yea some of the topics are harder than others and required more critical thinking, but overall the class was a 10/10. Some of the assignment questions could have maybe been worded differently for better comprehension, but I did like how there were multiple to choose from that discussed different topics from each weeks content.
- Overall I really enjoyed this course, and I think I gained a lot from it. I think leaving to w assignment deadlines flexible (until the end of each unit of course) was very helpful for those of us with full time jobs!
- This was the most organized online course I have taken in this program. I would change very little, if anything.
- The course was wonderful. I genuinely feel like I've been introduced to a wide breadth of important concepts and events and approaches in conservation that I did not know about. I also appreciate the detailed feedback on the assignments. So, thank you!
- One thing that was a challenge for me was that I found I poured a lot of effort into the class work assignments and then found myself scrambling to complete the assessments. Not only was this a mistake in terms of how the assignments were weighted, but the grading was appropriately more critical on the assessments. If I could go back and give myself a tip, I would remind myself that the bulk of my time and energy ought to be reserved for the assessments and not to burn myself out on the classwork.
- This course really challenged me! Although I'm a decent writer, I don't particularly enjoy writing papers and by gosh it was grueling at times this semester sitting down to write so much. Once it was complete and submitted, your feedback was absolutely wonderful and it was rewarding. Thanks for taking the time to actually read our stuff and give good feedback! I suggest you sprinkle in some assignments that encourage students to use other learning styles (maybe even some traditional multiple choice and short answers to test our knowledge). I really loved how flexible the class was and how interesting all the content was. I know writing papers is very important in the world of science, but the sheer amount we had to write would be my biggest (and really only) major critique of this class. Thanks for starting this class (it's admirable!). With some tweaks to the assignment/exam styles, I think it will be a well sought-after class at WKU.

Figure 5. Selected student comments from an additional, anonymous BIOL 575 survey.

Teaching & Student Development.

- **Graduate Teaching Assistants**: One of the biggest and most rewarding parts of my job involves the supervision of our graduate teaching assistants in our general biology labs.
    - In F24-S25, I managed 6 GTAs, 3 each in BIOL 121 and BIOL 123. I meet with the TAs from each course weekly, in one-hour prep sessions.
    - My TAs are provided with a course syllabus and lab curriculum each week and pre-lab quizzes and post-lab activities are also provided. I create shells for each section which are pre-loaded with everything needed for the term.
    - I have a Blackboard organization for each course which also houses term start and close directions as well as many guides and tutorials.
    - We use a live Google doc to house real-time feedback from my TAs on content, lab prep, class management, and assessments.
- **Graduate Students:**
    - In F24-S25 I was a committee member for six graduate students: Julia Brzezicki (Schulte), Serena Sieler (Schulte), Jerica Eaton (Johnson), Elizabeth Strasko (Johnson), Rianna Soltis (Grubbs), and Emma Bell (Stokes).
    - In addition, I served as Serena Sieler's primary graduate advisor after Dr. Schulte moved to UNC and as Emma Bell's as Dr. Stokes moved to emeritus status.
- **Undergraduate Research Projects:** I have created a Blackboard Organization for all my students participating in CE/T, BIOL 399s or 475. It houses all the necessary forms including general advice on citations, proposals, and formatting. Each student also has an individual folder I keep updated with project goals, feedback, and work products.
    - I supervised Sydney Reeves as a BIOL 399 student in F24. She used an existing data set to further investigate the drivers of bacterial and fungal root endophyte community structure.
    - In S25, I supervised 2 BIOL 399 students (Reagan Scheffel and Lauren Nesbitt) on a new project assessing the success of stream restoration efforts with Beaver Creek Hydrology at Goose Creek in Hestand, KY. Both students have continued throughout the summer and plan to do so in 25-26 as well. This is a long-term project on my new Davey Grant; they both aided in a literature review, stream reach selection, and leaf pack preparation and deployment.
    - I also supervised another BIOL 399 student in S25, Violet Weaver, who investigated student misconceptions regarding climate change. She analyzed qualitative data from an in-class assignment as part of the BLC Catalytic Grant from Pearson.
    - I chaired Alexandria Anderson's CE/T committee in Honor's. Her project was entitled Biocultural Mobility: The impact of osteoarthritis on rural Kentuckians
- **Internships:** I also coordinate student internships through two BIOL 369 courses.
    - The BioCoach program has been running since 2019 and is offered through BIOL 369 Cooperative Education in Biology: Learning Assistant Co-Op. These Learning Assistants (i.e., "BioCoaches") work with their small groups to facilitate study-starters during lecture and conduct group study sessions outside of class. This program has grown each year and is now regularly used by Drs. Marquardt, Katz, Smith, and Philips. I meet with all the BioCoaches for an orientation and then 3 more times throughout the semester for check-ins and feedback. Previous research has shown both the BioCoaches and our 120 and 122 students have an extremely favorable view of this program.
    - Additionally, I supervise our Patient Coordinator Program with Dr. McElroy through BIOL 369. In this course, our pre-med students get to work behind the scenes to assure patients receive quality and timely primary care. This internship was recently revamped to include more diversity in the assigned duties.

- **Poster Session:** I am also involved in student development through our General Biology Poster Session, featuring posters created by embedded honors students in BIOL 120 and BIOL 122. This program has grown into a tradition in our department.
    - I apply each term for an Honors Faculty Engagement Grant to fund the Poster Session. This year's grants totaled $1,397.00 (F24 = $947 and S25 = $450.00).
    - Other faculty have joined aboard, including Drs. Srivastava, Smith, and Katz. I currently apply every term for these funds and oversee the session even during terms in which I do not have 120/122 Honors students.
    - 90 Honor's students participated in 24/25.

Teaching Innovations. I believe innovation goes in hand with quality teaching and I am consistently updating and adding to all of my courses based on student feedback and best practice.

- Lab Innovations
    - All the BIOL 121 and BIOL 123 content was transferred to the Bb Ultra platform.
    - I created and monitored a new Google Doc to handle prep changes and updates between me, Mark Clauson, and his lab assistants.
    - I wrote a new online-only version of a previous in-class lab due to weather constraints and closures. This may be valuable again in another case of inclement weather.
- Lecture Innovations
    - BIOL 122
        - I continued revising in-class assignments to be more active. I have now revised 6 of the 10. The students continued to enjoy these assignments, and the BioCoaches felt the assignments were the strongest of the term.
        - I pilot-tested a new BIOL HelpDesk in S25 using three BioCoaches. Despite a lack of student participation, I still think this idea holds promise, and I'm anxious to implement it during a term in which I have a BIOL 122 course; I think it can improve student success in our large introductory courses.
    - BIOL 575
        - I created and taught a new course in S25. Conservation Ecology was offered as a hybrid course, which entailed both online and in-person portions. The creation and implementation of this course was extremely time-consuming but very gratifying.
        - Each week involved self-created content in three primary topic areas: the current biodiversity crisis, the primary ecological principles involved in conservation, and the paradigms and techniques commonly used to reach conservation goals. For the final course project, students selected two conservation plans and compared them using our content as a guide.
        - The appendix includes: syllabus, screenshots from Bb, analysis of student feedback, and my perspectives on the success of the course.
- New Pedagogical Research 24-25
    - Implementation of my new Student Misconceptions project began in BIOL 122 in F24 and will continue into F25.
    - Research also began on my project with Beaver Creek Hydrology with the new grant from Davey. We had several site visits to Goose Creek (the restoration site) and collected and set-up the leaf litter portion of the project. HOBOs (monitoring equipment) will be deployed this summer. This research will eventually be the basis of new labs for BIOL 123.

Teaching Reflection & Goals. I was able to move most of my goals from last year forward (see below). I plan to follow up on those that are still in progress and carry several new projects through in 25-26. My primary focus this year (in all areas) is to complete projects and work towards dissemination. I have taken some time since receiving tenure to think about what I want my professional identity to entail. I need to make progress on publication, dissemination, and professional society involvement.

Progress on Teaching Goals for F24-S25.

- Realign the order of content covered to mirror an "interleaving" pedagogical approach with the evolution of life on Earth as the throughline: Delayed. I made minimal progress on this goal, instead focusing my energy on developing the new Conservation Ecology Course (see appendices).
- Critically evaluate my BIOL 122 assessments this year: Complete. I deployed more practice questions during lecture in F24, with a focus on the "apply & analyze" style with which students seem to struggle. I also reviewed and revised all assessments with alignment in mind. However, my "assessments aligned" SITES score did not show much improvement and this needs further investigation.
- Revise 2-3 more in-class assignments: Complete.
- Increase the quantity of feedback to my students in the coming year: Complete. I develop a commonly missed list of questions for each exam and used the alert system set up in Mastering. My "feedback" scores showed improvement in my SITES evaluations and student also made comments to this effect.
- Work with Med Center Health to revise the Patient Coordinator Internship to include a better orientation and more variable duties for interns by S25: Complete. The internship now rotates students through 3 different activities and locations.
- Begin implementing the new modules on misconceptions in BIOL 122 as part of my Pearson grant: Complete.
- Begin drafts of 2-3 potential BIOL 123 labs using the real-time restoration data from the Goose Creek project: Complete. The labs are being drafted by one of my online graduate students, a current biology teacher.
- Meet with Paul Allen again and develop a proposal for lion scat analysis: Paused. The focus of the SA program shifted to accommodate Dr. Stokes' retirement.

Teaching Goals for F25-S26

- Complete implementation of the misconceptions project in F25.
- Work with Dr. Huskey on the interleaving, evolution-focused course design for BIOL 122, with draft proposal completed by S26.
- Transfer BIOL 122 into the Bb Ultra system framework for F25.
- Reconfigure the BIOL HelpDesk in F25.
- Continue to re-evaluate the assessment alignment issues perceived by my BIOL 122 students. I'll implement a walk-through style example for each unit in F25.
- Meet with Dr. Philips and Dr. Huskey to work on course alignment in BIOL 122 in S26.
- Continue to implement the Honor's Poster Sessions in F25 and S26.
- Continue working on the labs to accompany the restoration activities in Goose Creek with drafts by S26.
- Review and revise the new Conservation Biology course in S26.
- Submit the metacognition project for publication in F25.
- Complete data analysis on the misconceptions project by S26.
- Attend at least one national conference on pedagogy, aside from the BLC, in the following year.

Research/Scholarship/Creative Activity 0%

Research Productivity. As a pedagogical professor, I carry no research expectations. However, I view data collection and dissemination as part of quality pedagogy. I also use inquiry-based course designs (e.g., BIOL 397), which can lead to larger research projects and publications. Furthermore, I am a research scientist at heart and continue to be interested in ecological research, natural resource management, and conservation. Therefore, my research interests are quite broad, drawn from my pedagogical innovations, my inquiry-based course on clinical research co-taught with Dr. McElroy, and ecologically based projects that can contribute to both the literature and our introductory biology lab designs. Additional research projects also come from my service activities.

- Ongoing Projects
    - Metacognition. Teaching students to learn: The effects of a metacognition intervention in a large college lecture. Co-PI with Dr. Kerrie McDaniel. F21-S23. Manuscript in progress. IRB #20-178.
    - Inquiry. Measuring the impact of increased inquiry-based techniques introduced into the biology curriculum across courses and cohorts. (Co-PI, with Ms. Naomi Rowland). Ongoing data collection since S18-ongoing. Manuscript in progress. IRB #1110796-1.
    - Using small interventions to uncover and dislodge student misconceptions in general biology, collaboration with Lehigh University, the University of Michigan, and Western Kentucky University. WKU-IRB #2214060-1. Grant from BLC.
    - Ecological research initiatives across regulatory spaces: Goose Creek Mitigation, collaboration with Beaver Creek Hydrology and Western Kentucky University, online graduate student project, Samatha Morgan. Grant from Davey Mitigation.
- Current Research-Based Grants
    - Uncovering student alternative knowledge and using small interventions to dislodge misconceptions, $10,000 >> awarded S25.
- New Research-Based Grants
    - Ecological Research Initiatives across Regulatory Spaces, Goose Creek Mitigation, $12,000, Davey Environmental Consultants >> awarded F24.

Research Quality (* denotes student under advisement)

- LaCommare, K., Mountjoy, N., Nesmith, J. Catalytic Grant Winners: Uncovering Student Alternative Knowledge and Using Small Interventions to Dislodge Misconceptions. Pearson's Biology Leadership Community Summit, Myrtle Beach, South Carolina, April 12, 2025.
- LaCommare, K., Mountjoy, N., Nesmith, J., O'Keefe, Kayleigh. Uncovering student alternative knowledge and using small interventions to dislodge misconceptions. Poster presented at Pearson's Biology Leadership Community Summit, Myrtle Beach, South Carolina, April 11-13, 2025.

Research & Student Development

- My online graduate student, Samanth Morgan, is working on the Goose Creek Project. She has already had several field days and completed a literature review. Our current focus in on translating the project to lab activities that can be completed by her high school students and expanded to be rigorous enough for BIOL 123. She plans to finish in S26.

- I accepted a new online graduate student in S25, Jillian Keefer. Her project centers on the conservation status of subspecies of giraffe. She will be analyzing how their natural history has impacted their status and the targeted conservation efforts that may be required. This project is still under development.
- As of S25, I am now Emma Bell's primary graduate advisor. She is researching the impact of ant infestations on herbivory in South Africa. Dr. Stokes will maintain his role on her committee as Emeritus faculty.

Research Reflection & Goals. I am excited to have started a few ecology-based projects over the past year and I look forward to growing these in F25-S26. I am also enthusiastic about my on-line graduate students and working closely with them on project design and implementation. I intend to focus on disseminating research results over the next 2 years as data collection continues on these projects.

Research Goals for F23-S24 and progress updates.

- Work with Beaver Creel Hydrology on a timeline and research goals for our partnership in F24. Complete and Ongoing. We received the grant from Davey in F24 and had made several sites visits. Data collection has begun and is ongoing. This project now support 2 BIOL 399 students and an online graduate student.
- Meet with Paul Allen again and develop a proposal for lion scat analysis. Discuss partnerships with the BioTech Center through Ms. Cook and review protocols for eDNA analysis with Jarrett Johnson and to determine feasibility in F24. Delayed. To be reevaluated.

Research Goals for F25-S26. Please note teaching-only research goals are listed in that section. These may include pedagogical outcomes, but are built around other research goals.

- Continue work with Beaver Creel Hydrology on Goose Creek. Conduct regular site visits for data collection throughout F25-S26 and complete drafts of new labs for BIOL 123.
- Meet with Paul Allen again and develop a proposal for lion scat analysis. I'm unsure where this project stands with Dr. Stoke's retirement, but I would like to continue to explore this possibility. I will be returning to SA on a study abroad trip in Su26.
- I would like to attend the ESA conference next year using new funds from the Davey Grant.

Service 22%

Service Productivity

- Department of Biological Sciences committee membership or leadership
    - Recruitment Committee, Chair 2024-current
    - Progression Committee, 2024-current
    - Previous Posts
        - Retention Committee, Chair 2017-2024
        - Advising Committee Member, 2019-2024
        - Climate Committee, 2023-2024
- Ogden College committee membership or leadership
    - Student Success Committee, Chair 2024- current, Co-chair 2019-22, member since 2017
- University committee membership or leadership

    - CITL Gateway Initiative, 2022-current
- Graduate thesis committee membership F24-S25
    - Rianna Soltis (Grubbs, 2024), Emma Bell (Stokes/Primary, 2024), Julia Brzezicki (Schulte, 2023), Serena Sieler (Schulte/Primary, 2023), Jerica Eaton (Johnson, 2023), Elizabeth Strasko (Johnson, 2022)
    - Honor's thesis committees: Alexandria Anderson, CE/T advisor, "Cultural Mobility: The biocultural impact of osteoarthritis on rural Kentuckians." Passed with Distinction upon defense in April 2025.
- Student advising (# of advisees): 65 total
    - 36 undergraduate advisees in F24
    - 29 undergraduate advisees in S25
- Public outreach
    - I transitioned to Science Advisor for the Western Kentucky Botanical Garden in F24. Previously: Board of Directors, Owensboro, KY, 2016-2024
- Involvement in professional societies:
    - Member: Association of American Colleges and Universities, National Science Teachers Association, Society for Human Ecology, Ecology Society of America, Society for Conservation Biology
    - Biology Leadership Community, Advisory Committee
- One-time service opportunities in F24-S25
    - Department of Biological Sciences Preview Days Volunteer, S25.
    - Department of Biological Sciences HelpDesk, S25.
    - Review committee for Provost Bud Fischer, S25.
    - Failing Forward, WKU PD Day, January 16, 2025. Invited Speaker.
    - First Year Seminar Series, F24.
    - TRIO Visit Volunteer, F24.
    - Developed an online "How To" guide for graduate school, F24.
    - AED Guest Speaker, F24.
    - Colonnade Assessment Oversight for BIOL 120 and 122, F24-S25, recurring.
    - Managed the Biology Poster Session F24-S25, recurring.

Service Quality & Innovation The breadth and depth of my service is best understood through the activities I have led and participated in over the past year, most of which were new innovations. They are listed below.

- Ogden Student Success Committee (formerly Retention Committee)
    - The committee takes an active role in the 5th Assessment process each term, including student and faculty emails and reminders.
    - Every term, the committee conducts an Advising Campaign to prepare students for registration. The "Get Advised Campaign" includes creation of college advising recommendations, communication templates and college-wide emails, and print/digital materials to advertise the advising season.
    - We created and manage two advising webpages (one for students and one for faculty). We also create and manage a technology page for students.
    - Innovations in F24-S25
        - We are developing a new Study Hub that will go live next year. It includes information on metacognition, general study tips, where to find help, and assistance with common issues across the STEM fields.

        - We conducted several student focus groups to best understand what students would like to have in a study hub and how they would navigate the new website.
        - We implemented a new Parent Text Alert system in S25, which currently has over 400 participants. We marketed the new feature with help from Lacey DiPietro-Bell. We design and timed the alerts in cooperation with Jennifer Anderson, who uses in-house tech to push out the texts. The text alerts are designed to communicate with parents on important retention-related activities, like 5th week assessments, mid-terms and finals week, advising, and registrations
- Biology Recruitment Committee
    - Recruitment Events: We led several Preview Days, a visit from TRIO, and Dr. McDaniel attended the KTSA conference on our behalf.
    - We commissioned special DNA pencil holders, branded with our new concentrations, as departmental giveaways. These were produced for us by Engineering using their 3D printer. Drs. Huskey and McDaniel led this effort.
    - We created a new handout/worksheet to advertise our new concentrations.
    - I led the effort to create new webpages and logos for all our new concentrations with assistance from Jenny Clauson, Dr. McDaniel, and the committee.
    - We curated all the relevant information for each concentration, including career options and job statistics, relevant electives and Colonnade courses, and tailored departmental and university opportunities (e.g., clubs, internships, study abroad, etc.).
- Biology Progression Committee
    - We curated four-year course plans for all the new BIOL concentrations with faculty help and input. I created the plan template and led the EWC effort.
    - We offered a First Year Seminar Series in F24. I coordinated three seminars: one on study skills, advising, and one on ways to get involved in our department (which included a student panel). Drs. McDaniel, Huskey, Marquardt, and Stewart helped co-lead the seminars, which were well-attended (20-40 students each). These seminars are designed to improve student success and retention.
    - We led a conversation to revamp our supporting courses and redefine BIOL 369 as true internships.
    - We also overhauled and redesigned our internship opportunities webpage, which now targets each concentration with relevant opportunities.
    - We began creating “boxed kits” for various activities for external visits (e.g., schools, groups, etc.).
    - We began to overhaul several displays to better reflect our new offerings.

Service Reflection & Goals. The new concentrations we have developed as a department have required a considerable amount of work from all of us. My committees have led the charge in making recruitment to and progression within these new concentrations successful. As committees, we look forward to continuing the work and broadening our efforts into our other majors.

Service Goals for F24-S25 and progress updates.

- Offer 4 first-year seminars in F23-S24. Complete. We offered 3 seminars instead of 4 on study help, advising and curricular assistance, and on ways to get involved in research and other departmental opportunities.

- Offer 2 Advising Workshops as part of the Ogden Retention Committee, one in F24 and another in S25. Complete. We offered two club advisor workshops, one to faculty and one to students in the fall and spring, respectively.

Service Goals for F25-S26

- Host another set of first-year seminars in F25, or internalize the content into lecture. This decision needs to be made by all parties involved.
- Complete new web pages for the other majors in our department following our redesign by the end of F25.
- Complete the new showcase focused on our concentrations by the end of F25.
- Successfully implement the new Parent Text Alert System in F25 and S26.

Professional Identity and Impact

I have continued to have a large impact on our general biology introductory courses. I consistently apply innovative pedagogical best practices to enhance student learning (e.g., inquiry-based labs, assignments that require and enhance critical thinking and evidence in argument, and process-based curricula). My research plays a critical role in my teaching, and they often feed each other. I am excited to have branched back into ecological research this year. I look forward to integrating my research projects into inquiry-based lab modules. My service also aligns with my teaching in that recruitment, progression, and student success are critically important for our first-year students, whom I serve regularly through teaching and advising. I care deeply about the quality of instruction our students receive and the climate in which they receive it. At every possible juncture, I seek to tie my teaching, research, and service in a way that allows the whole to be greater than the parts (Figure 6). I am looking forward to the new direction in which our department is moving and plan to continue making meaningful contributions in F25-S26.

As I look ahead toward applying for full professor, I intend to focus more of my efforts on dissemination and involvement with professional societies. I have several manuscripts that I should be able to submit in the next year or two, and ideas for one or two more. I also have some grant money that I can use to attend 1-2 national conferences in the upcoming year, to facilitate greater society involvement. This shift will necessitate lesser involvement in several service projects that I intend to hand off or make self-sufficient, but this strategy will help ensure that my achievements are recognized on a broader scale that best fits the role of full professor in the Department of Biological Sciences.

Figure 6. How I view my professional identity moving forward. I have been intentional in identifying these three important components, and moving forward, I will work diligently in these areas and close out or spend less time in areas that do not contribute directly to the identity I am seeking to build.

Appendix 1. BIOL 575 Syllabus

Conservation Ecology
BIOL 575 001 & 750
Course Syllabus

BIOL 575 Conservation Ecology is a Hybrid Course

Section 001 is online · Section 750 is in-person

Course Description. This course will provide a background in the ecological principles that guide conservation efforts. We will explore: the history of the environmental movement; modern restoration, and conservation strategies used to address the current biodiversity crisis; the ecological concepts that guide such efforts; and the socio-ecological impacts of conservation, restoration, and natural resource management.

Instructor. Natalie Mountjoy, natalie.mountjoy@wku.edu, 3017 KTH
Office Hours: Tuesdays 8-10 AM. These are subject to change in the first 2-weeks of the term and will be updated on your Blackboard course.

Course Objectives/Learning Outcomes

1. Appreciate the extent of the current biodiversity crisis, its primary causes, and the ways the crisis is measured, reported, and translated into research and conservation action.
2. Build an understanding of the environmental movement, including its cause and response, and how the past informs our current conservation context both by way of legislation and public perception.
3. Learn to appreciate the various value systems humans use to construct their relationships with the natural world -and- how those varied systems can both complicate and support conservation efforts.
4. Establish general mastery of the ecological concepts that explain species loss and should drive decision-making, planning, and implementation of natural resource management and restoration initiatives.
5. Become proficient in the conceptual and quantitative foundations of conservation to apply the models, tools, and techniques, based in theory, to real-world conservation problems.
6. Learn to combine information and approaches from a variety of disciplines including the natural and social sciences, to develop effective conservation planning.

Course Materials

All materials will be provided on Blackboard including readings from the scientific literature, excerpts from textbooks, and resource management planning documents.

Course Content

Unit 1 Context. Biodiversity Crisis · Environmental Movement· Value Systems · Ecosystem Services

Unit 2 Concepts. Population Viability · Quantifying Diversity · Island Biogeography · Disturbance Theory · Ecosystem Function

Unit 3: Crisis & Action. Conservation & Adaptive Management · Restoration · Resilience · Resistance · Environmental Policy · Social-Ecological Systems

Conservation Ecology
BIOL 575 001 & 750
Course Syllabus

Course Schedule

Unit	Week	Topics	Assignment	"Due" Dates	Pts
Introductions	Pre	Introduction	Video Post to Slack	Friday	15
Context	1	Current Extinction Crisis	Assignment & Post	Friday	15
	2	Environmental Movement	Assignment & Post	Friday	15
	3	Values & Ecosystem Services	Assignment & Post	Friday	15
	4		Unit 1 Exam Due Friday	Friday	75
Concepts	5	Quantifying Biodiversity	Assignment & Post	Friday	15
	6	Disturbance Ecology	Assignment & Post	Friday	15
	7	Ecosystem Function	Assignment & Post	Friday	15
	8		Unit 2 Exam	Friday	75
	9	Spring Break			
Conservation	10	Conservation & Management	Assignment & Post	Friday	15
	11	Restoration & Resilience	Assignment & Post	Friday	15
	12	Social-Ecological Systems	Assignment & Post	Friday	15
	13		Unit 3 Exam Due Friday	Friday	75
Final Project	14	Conservation, Restoration, or Resource Management Plan Contrast	Meetings	Friday	
	15		Optional Draft	Friday	
	16		Final Project	Friday	100

Due dates as shown are to help keep you on track. The "drop -dead due dates for all assignments are the same day/time as the exam for each unit. Due dates marked with * are not flexible.

Grading

Introduction (15 pts). You will post one short introduction video on SLACK.

Assignments (10 pts. each). These assignments may consist of summaries, reflections, opinion pieces, figure creations, or brief literature reviews. In-person students can substitute summaries of our in-class discussions if scheduled in advance. You will have 9 and must complete 6 assignments = 60 points. *Please note, for assignments that you will "skip" you still must submit; just write a note in the submission so I know the missed assignment was purposeful.

Discussion Posts. (5 pts each). You will have 9 discussion boards to be submitted through Blackboard. Everyone must post on 8 = 40 points. *Please note, for the discussion that you will "skip" you still must post; just leave a note so I know the miss was purposeful.

Exams. (50 points each). You will have 3 = 150 points. Exams will be open-book (et al.) and essay-based. Each will cover the primary content of the unit and involve synthesis of the key topics.

Final Project. = 100 points. You will compare and contrast two management/ conservation/ restoration plans as they relate to the material we have covered. Details will be provided via Blackboard.

Due Dates. All assignments are due the same day as the exam covering the connected content. Ideally, you should review the content, complete an assignment, and post at the end of each week to stay current, but the due dates on the course schedule reflect an ideal timeline. I know many of you are balancing this class with full-time or part-time jobs, so this flexibility allows you to do the work for each unit as and when you are best able. Exam and project deadlines are set.

All Submissions. Please only submit via Blackboard, never via email. Please post all submissions as PDFs. Use the PDF help link in Bb if necessary. Formatting is up to you, but please be sure to follow APA style guidelines (also linked in Bb) for all your in-text citations and references.

Conservation Ecology
BIOL 575 001 & 750
Course Syllabus

Attendance

In-class attendance is mandatory for students enrolled in the in-person section. One letter grade will be dropped for each unexcused absence.

Communication

I will communicate with the class regularly through announcements on Blackboard. There are also discussion options attached to each assignment (in Bb) should you have questions, thoughts, or considerations. I am always happy to schedule meetings in person or via Zoom as well. Being a hybrid course does not mean you are without help or guidance!

Additionally, we will use SLACK for easy communication as a group. The app is free, and the sign-up link is posted on Blackboard.

Course Materials

We will use many different papers throughout this course. I have provided them as embedded pdfs in the associated content summaries. In some cases, you will be looking for your own papers or you may want access to a paper that has been cited but not provided. Please take note:

- Occasionally the paper will be freely available, just through your browser. I'd start with Google Scholar and just enter the title.
- In some cases the abstract is provided, but not the full text. If this is the case, WKU likely has access and so do you through our library. If you're not on a campus computer, you will need to sign into the library using your WKU account to access such articles.
- From the WKU-Library home page, type "Google Scholar" in the search bar.
- The database will be the first one listed. Click there, and go ahead and use it just like you would otherwise. The difference is now you have access to everything WKU has access to.
- If you want an article that WKU does not have access to, just complete a quick loan request and they'll email you the article often in less than 48 hours. The link is posted to Bb.

General Policies

AI Policy: Artificial intelligence (AI) tools are not permitted for any type of work in this class. If you choose to use these tools, your actions will be considered academically dishonest and a violation of the WKU Student Code of Conduct.

Integrity & Student Conduct: Academic Integrity & Student Conduct: Cheating/academic dishonesty in any form (plagiarism, altering exams, crib sheets, cell phone usage, etc.) is not tolerated. Student behavior or speech that disrupts the instructional setting or is clearly disrespectful to the instructor or fellow students will not be tolerated. Violations will result in dismissal from the course with a grade of 'F', and this policy will be strongly enforced. Disruptive conduct or breeches in academic integrity may include but are not limited to:

1. Rude or disrespectful behavior
2. Unwarranted interruptions
3. Failure to adhere to instructor's directions
4. Vulgar or obscene language, slurs, or other forms of intimidation
5. Physically or verbally abusive behavior
6. Inappropriate questions or advances toward your instructor or other students
7. Failure to work with your lab group

Conservation Ecology
BIOL 575 001 & 750
Course Syllabus

Fraudulent notes or excuses from professionals Such conduct or actions will also result in disciplinary action as specified in the WKU Code of Conduct and per university guidelines, any instances of academic misconduct will also be reported to the Office of Student Conduct.

Sexual Misconduct, Discrimination & Harassment: Western Kentucky University (WKU) is committed to supporting faculty, staff, and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at https://www.wku.edu/policies/docs/182.pdf and Discrimination and Harassment Policy (#0.2040) at https://www.wku.edu/policies/docs/251.pdf. Under these policies, discrimination, harassment, and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

The Learning Center (TLC): The Learning Center (DSU 2141) provides free supplemental education programs for all currently enrolled WKU students. TLC offers CRLA Certified, one-on-one tutoring by appointment or walk-in. TLC also provides quiet study area, with side rooms designated for peer to peer tutoring, and offers a computer lab. For more information, or to schedule a tutoring appointment, please call TLC at (270) 745 - 5065 or log on to the website at https://www.wku.edu/tlc.

Food Insecurity: Food insecurity is defined as a condition where persons, in this case students, do not have adequate resources to feed themselves, either nutritiously or not at all (USDA, 2013). According to a recent national study (Hunger on Campus, 2016), food insecurity is common at colleges and universities across the country, potentially undermining the educational success of untold thousands of students. If food insecurity is an issue for you or someone you know, help is readily available. Contact the WKU Office of Sustainability at (270) 745-2508 or email sustainability@wku.edu or visit starvingtolearn.com.

Sexual Misconduct, Discrimination & Harassment: Western Kentucky University (WKU) is committed to supporting faculty, staff, and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at https://www.wku.edu/policies/docs/182.pdf and Discrimination and Harassment Policy (#0.2040) at https://www.wku.edu/policies/docs/251.pdf. Under these policies, discrimination, harassment, and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

The Learning Center (TLC): The Learning Center (DSU 2141) provides free supplemental education programs for all currently enrolled WKU students. TLC offers CRLA Certified, one-on-one tutoring by appointment or walk-in. TLC also provides quiet study area, with side rooms designated for peer to peer tutoring, and offers a computer lab. For more information, or to schedule a tutoring appointment, please call TLC at (270) 745 - 5065 or log on to the website at https://www.wku.edu/tlc.

Food Insecurity: Food insecurity is defined as a condition where persons, in this case students, do not have adequate resources to feed themselves, either nutritiously or not at all (USDA, 2013). According to a recent national study (Hunger on Campus, 2016), food insecurity is common at colleges and universities across the country, potentially undermining the educational success of untold thousands of students. If food insecurity is an issue for you or someone you know, help is readily available. Contact the WKU Office of Sustainability at (270) 745-2508 or email sustainability@wku.edu or visit starvingtolearn.com.

For more important guidelines, policies and resources, visit: https://www.wku.edu/syllabusinfo/

Appendix 2. BIOL 575 Blackboard Course

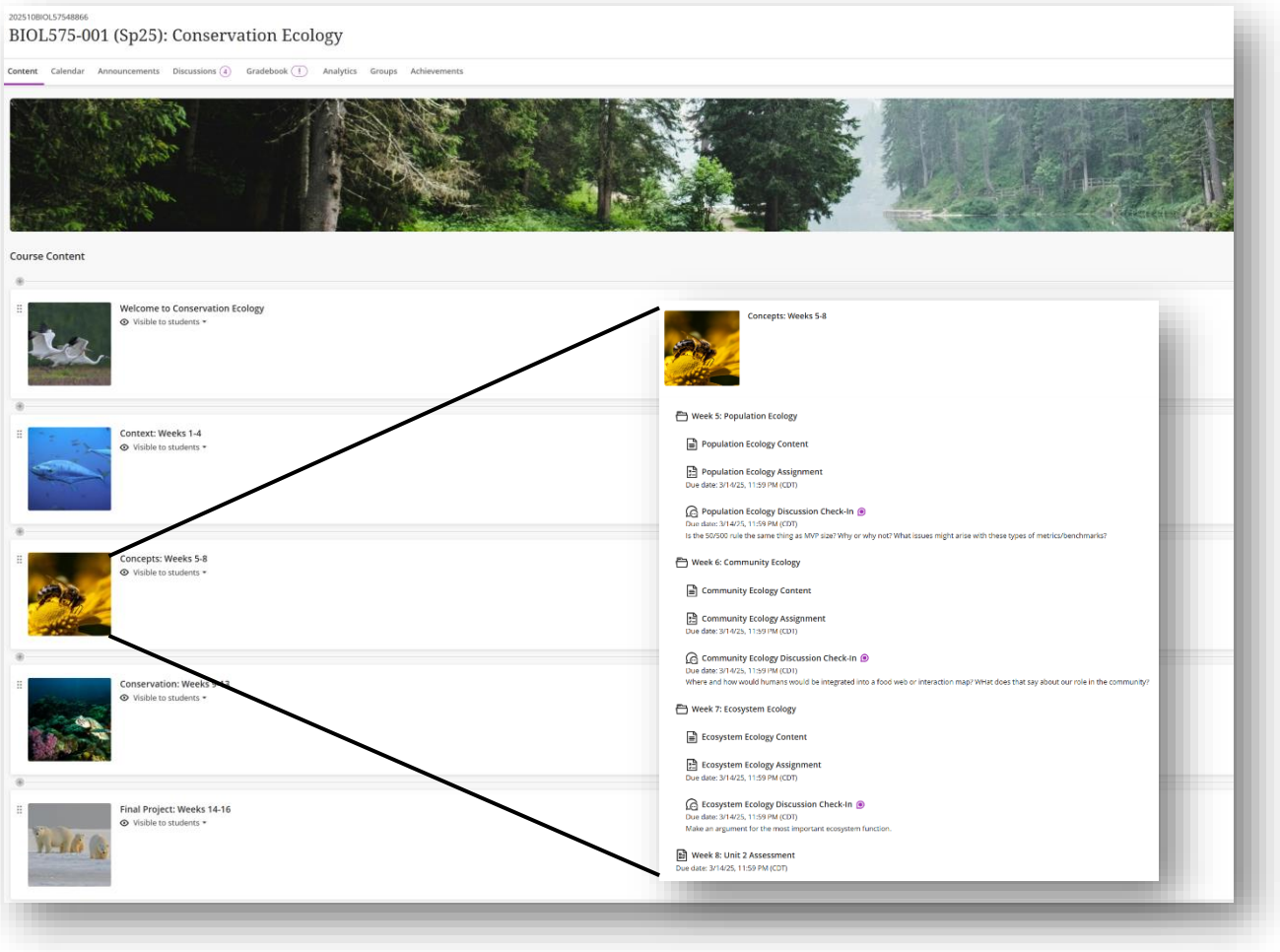

Figure 7. Blackboard site for BIOL 575 (both sections) with expanded example for Unit 2: Concepts. Each unit comprised three content weeks and an assessment week. Each content week included a discussion post submission and an assignment. The assignments were a choice between a written response, lesson plan, a graphic, or a presentation, and related directly to that week's content.

Appendix 3. BIOL 575 Assignment Example

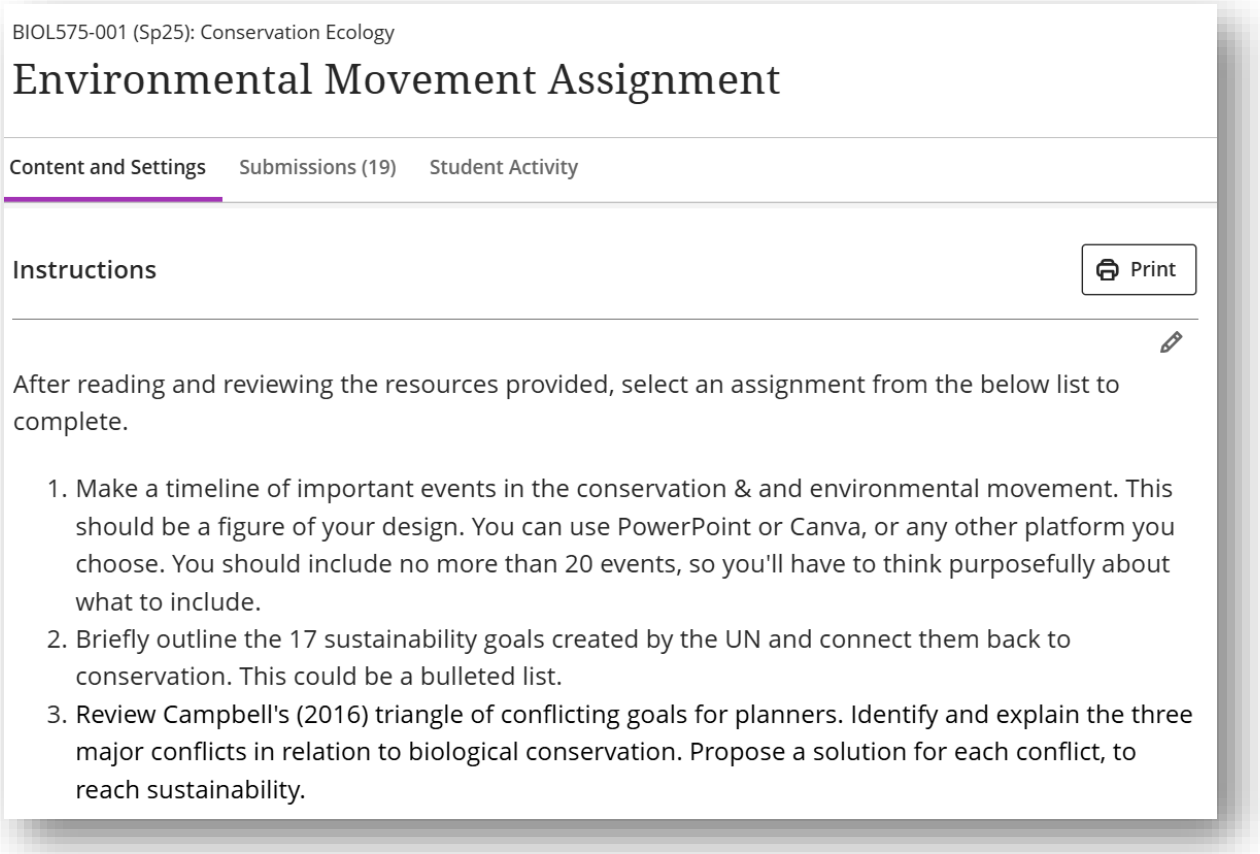

Figure 8. Assignment example from Unit 1: Context, Week 2: The Environmental Movement. Each week, the content included 2-4 sections, and the assignment options covered each and allowed for different types of products.

Appendix 4. BIOL 575 Content Examples

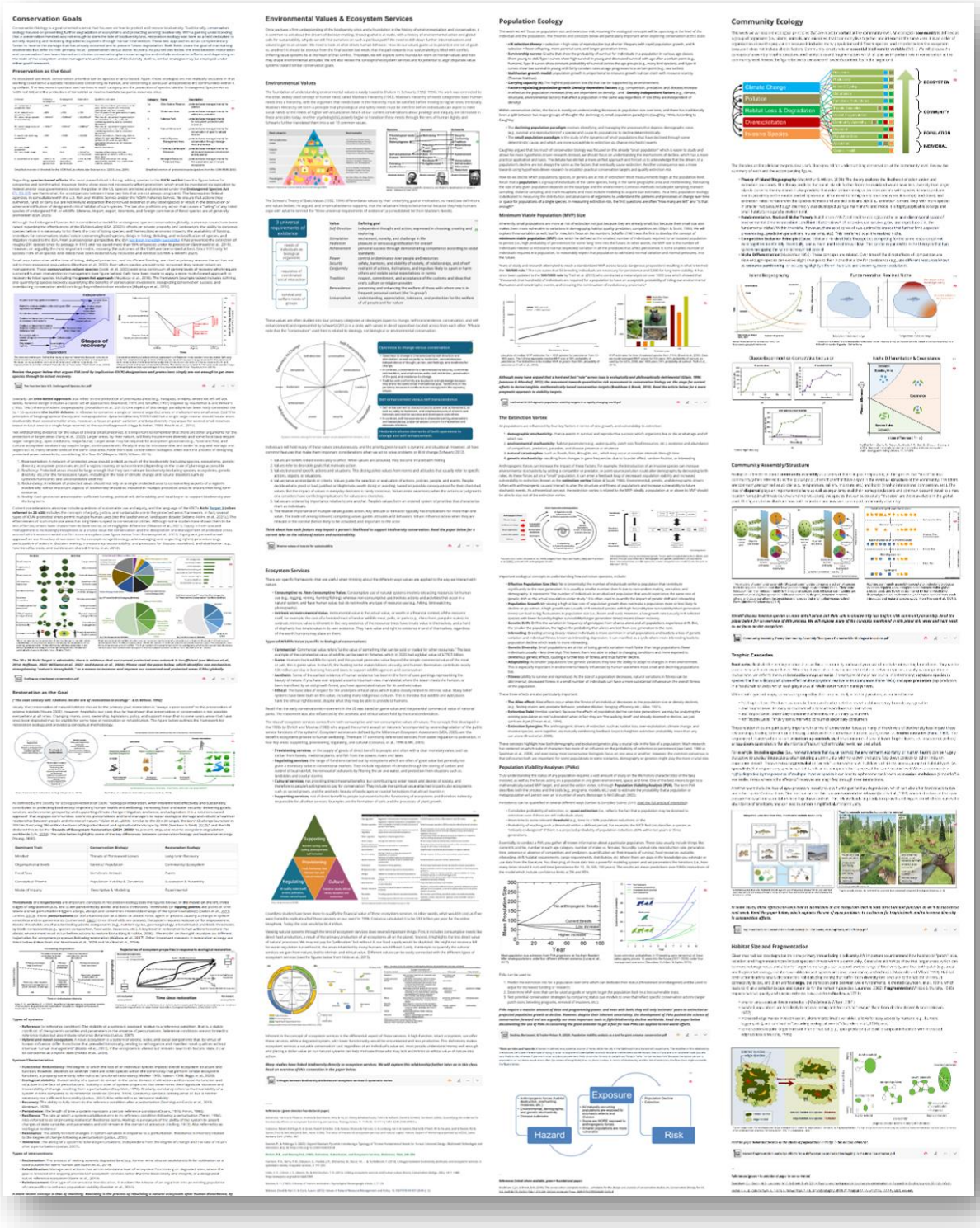

Figure 9. These are screenshots of the content created for each week and posted to Blackboard. These four were included as diverse examples from different units. Each set contained written explanations of concepts as well as videos, links to scientific papers, and images, as well as links and references to foundational literature and current examples.

Appendix 5. Student Responses to the Additional Survey

Table 2. Item responses to online student survey (N=8) to questions asking students to rank their level of agreement with the following statements on a scale from 5 = completely agree to 1 = completely disagree.

Question Item	Mean	Mode
This class required the "right" amount of time for me.	4.25	5.00
This class had the "right" amount of flexibility for adult online learners.	4.75	5.00
This class taught me a lot about conservation.	5.00	5.00
This class helped me think about conservation in new ways.	4.88	5.00
This class helped me get familiar with important concepts in conservation.	5.00	5.00
This class helped me get familiar with the scientific literature on conservation.	4.88	5.00
The assignments helped me engage with the concepts.	4.75	5.00
The assignments helped me engage with the readings.	4.63	5.00
The assignments helped me think critically about our content.	5.00	5.00

Appendix 6. BIOL 575 Course-Reflection

Overall, I think this new course was very successful, and student scores and comments show agreement. The least successful portion was the in-person component, with only 2 students who were new to the idea of class discussions. They often elected to complete the online activities instead of meeting face-to-face. I hope to have more students enrolled in the in-person section in the future so class discussion can be more productive. Additionally, I will limit the number of times students can opt for the online assignments.

I did not create any online lectures for this course, and some students mentioned they might have been helpful. Example student comments: “I learn much better in the moment listening to lectures and can remember key points better from how they're presented. But it is extremely helpful to have the content pages to go back and reference,” and " My experience with videos is actually that the texts are just more efficient. There's an ability to scan and search more rapidly. I think the content pages worked really well.” Next time, I will create 4 lectures, one per unit, that lead students through the concepts, their connections, and some of my own experiences.

Some students also commented that the writing expectations were too high. Example student comments (same student): “Not going to lie, we wrote so many papers for this class that I was really hoping that for the final project we would be able to deviate a little bit buttttt...nope, just another (long) paper,” and “This course really challenged me! Although I'm a decent writer, I don't particularly enjoy writing papers and by gosh it was grueling at times this semester sitting down to write so much.” I did give several assignment choices each week, and at least one was a non-written option. I can easily add additional non-writing options each week in the future.

Overall, students commented that they learned a lot in this course, felt the workload was manageable and appreciated the built-in flexibility. Comments concerning the end-of-term project were extremely positive. Example student comments: “I thought the final project was interesting to do…it definitely pushed me outside my comfort zone since I’m not super well-versed in the more technical side of conservation, but I feel like I learned a lot,” and “I loved the final project…I think it was kind of the perfect way to synthesize the content of the course and actually apply it to the real world.

Every student who took my additional survey “strongly agreed” that this course taught them a lot about conservation, help familiarize them with important conservation concepts, and helped them think critically about the conservation and ecology content. I look forward to teaching this course again in the future and perhaps creating a partner BIOL 397 science process course at the undergraduate level.