Nomination Packet for F.J. Taylor Undergraduate Teaching Award 2022
Joel L. Stake, Ph.D.
Assistant Director, Honors Program
Senior Lecturer, School of Biological Sciences

List of Undergraduate Courses Taught:

Course	Enrollment 9th Day	Enrollment Final	Student Evals	Course	Enrollment 9th Day	Enrollment Final	Student Evals	Course	Enrollment 9th Day	Enrollment Final	Student Evals
Fall 2016				Fall 2018				Fall 2020			
BISC 101	177	173	3.8	BISC 101	176	170	3.9	BISC 101	176	170	3.7
BISC 101	175	173	3.9	BISC 101	174	173	3.9	BISC 102	118	115	3.9
BISC 102	157	153	3.8	BISC 102	104	102	3.9	BISC 225C	36	36	4.0
				BISC 130	160	155	4.0				
Winter 2017				Winter 2019				Winter 2021			
BISC 101	175	163	3.9	BISC 101	175	166	3.7	BISC 101	136	129	3.8
BISC 101	175	170	3.9	BISC 101	177	164	3.9	BISC 101	136	134	3.7
BISC 102	150	143	3.8	BISC 102	131	128	3.9	BISC 102	168	165	3.8
Spring 2017				Spring 2019				Spring 2021			
BISC 101	163	156	3.8	BISC 101	132	122	4.0	BISC 101	175	175	3.8
BISC 101	175	171	3.8	BISC 101	174	165	3.8	BISC 101	175	155	3.6
BISC 102	148	144	3.8	BISC 102	138	131	3.7	BISC 102	176	176	3.9
Summer 2017				Summer 2019				Summer 2021			
BISC 101	25	25		BISC 130	17	17		BISC 101	32	32	
BISC 130	25	25		BISC 101	36	36		BISC 101	24	24	
								BISC 102	32	32	
Fall 2017				Fall 2019				Fall 2021			
BISC 101	175	171	4.0	BISC 101	175	173	3.9	BISC 101	180	180	3.8
BISC 101	175	171	3.9	BISC 101	177	174	4.0	BISC 101	116	116	3.9
BISC 102	125	124	4.0	BISC 102	91	87	3.9	BISC 102	165	165	3.9
				BISC 130	172	170	3.9	BISC 130	119	119	4.0

Winter 2018				Winter 2020				Winter 2022			
BISC 101	174	165	3.8	BISC 101	175	165	3.8	BISC 101	132	122	3.9
BISC 101	175	172	3.9	BISC 101	177	168	4.0	BISC 102	84	78	4.0
BISC 102	97	94	3.9	BISC 102	136	131	4.0	HNRS 105	24	24	4.0
Spring 2018				Spring 2020				Spring 2022			
BISC 101	147	146	3.9	BISC 101	175	165	3.7	BISC 101	140		
BISC 101	175	174	3.8	BISC 101	176	169	3.7	BISC 102	109		
BISC 102	142	139	4.0	BISC 102	166	160	3.9	HNRS 106	14		
Summer 2018				Summer 2020							
BISC 101	30	30		BISC 101	56	56					
BISC 102	26	26		BISC 102	37	37					
				BISC 101	36	36					
				BISC 102	13	13					

Over the past six years I have taught 8,809 students with a 97% retention rate and an average student evaluation rating of 3.9.

Statement of Beliefs Concerning the Significance of Undergraduate Teaching Within the Overall Mission of Louisiana Tech University:

I accepted this job at Louisiana Tech University specifically because the focus was on undergraduate teaching. I was in a previous faculty position where I was evaluated on my research output, teaching, and service to the university. Although I was able to successfully navigate the tenure and promotion process at my previous university, I have always felt more at home in the classroom than the laboratory or field. My main priority in teaching at Louisiana Tech has been creating a learning experience in my courses that is focused on providing context for broad biological knowledge in order to help students access and engage the living world in a more meaningful way. I believe that effective teaching is built on the foundation of creating an enriching and engaging experience that provides students the opportunity to learn course content along with intellectual and practical skills for the future. A well-thought-out, well-designed course experience brings about the kind of education a teacher wants for a student and creates a foundational experience that students can build on throughout their course of study and throughout their life.

I primarily teach large, general education classes (enrollments of 150+ in most sections), so a more intimate learning environment with customizable activities and the ability to get to know each individual student on a personal basis is challenging. Additionally, students in a required general education course do not always

appreciate the value or important application of classes outside of their major. Because these are the very students that may benefit tremendously from the scholastic freedom liberal education provides through our general education courses, upon my arrival, I set out to build a classroom where students feel engaged and are shown the value of a liberal education. I believe a liberal education is vital to any university experience, including Louisiana Tech University. The shift away from liberal education toward servile education reflects the broader shift toward job placement after college, although servile education itself is not a new concept. I was asked during my interview for this position why I wanted to leave my previous institution to come here to teach non-major, general education biology classes rather than stay and continue to teach biology majors and courses specific to my specialty; my answer is still the same -- because I feel like it is where I can make the biggest difference.

Description of Any Important Innovations You Have Made in Undergraduate Teaching:

One of the ways I try to engage my students is through the thoughtful use of technology. Technology can help provide an opportunity for engagement before, during, and after class. It gives me the ability to introduce, reinforce, and assess in variety of ways, both inside and outside of the classroom. The combination of formative and summative assessments throughout my courses help shape the core of student learning. I have always enjoyed helping students connect with biological content and seeing their amazement when they connect that content to something outside of the classroom in the "real world." To accomplish this goal, I have implemented two major changes in hopes of providing an optimal learning experience. First, I transitioned the course from a traditional print textbook to a free, open educational resource (OER) textbook, and second, I started using Top Hat, an active learning platform, in all of my courses.

The Top Hat platform provides an all-in-one learning platform for my students, including the integrated OER textbook. It allows me to easily monitor student participation and performance so that I can move at the appropriate pace for each class. It provides an easy way to engage my students through interactive readings and assignments outside of class and using polls, questions, quizzes, and multimedia elements in class to gauge understanding and encourage participation. I can customize the content within my course, and the textbook, to keep content up-to-date and relevant. I can provide supplemental learning material with additional assessments or discussion questions to help student increase their depth of understanding. The platform also provides the benefit of increased flexibility and accessibility for students by centralizing resources in one place for them to use in class or anywhere with an Internet-connected device. I have built a strong relationship with Top Hat, and I continually work with both the software and the company on improving course content and access. Unfortunately, in our society, not everyone goes into a college course with an even playing field. I work hard to make certain that access to the material and access to the technology are not a hindrance to the opportunity to learn. By collaborating with Top Hat from the start, I can ensure that even those who cannot afford the subscription will have access to the platform through free access codes for students in need. Opportunity to experience learning is the key to finding success in the classroom.

Outside of practical and functional learning management changes, the other thing that I focus on with students is putting my full enjoyment on display. I have learned through experience that my joy in teaching and my love for biology can permeate through the classroom. Why should they be excited to learn about biology if I am not

excited to tell them? My excitement and enthusiasm, if nothing else, can be entertaining for them and make them curious about the content we are covering in class. If they leave my class with a little more understanding of the living world around them, a little more appreciation for how living things operate, and a little more impulse to ask why living things function and change the way they do, then I count that as a "win" for learning.

A List of Recent or Relevant Publications, Papers, and/or Presentations that Relate to Teaching:

My use of both Top Hat and the OpenStax textbook are featured in a Spotlight section of the book *Best Practices for Teaching with Emerging Technologies, 2nd Ed.* by Michelle Pacansky-Brock.

Invited speaker for a Top Hat webinar titled The Kids Are Not Alright: Lessons Learned from Fall 2020

This, or That? Shifting Dichotomous Perspectives in Student Thinking, Top Hat Engage 2022, teaching technology demonstration during the Product Keynote presentation

Additional Pertinent Information (e.g., honors and awards, professional society membership, leadership positions, service activities, etc.)

Awards:

Outstanding Advisor Award, College of Applied and Natural Science, Louisiana Tech University, 2020

Teaching Award for 100/200 Level Courses, College of Applied and Natural Science, Louisiana Tech University, 2017

Service:

Student Success Council, Louisiana Board of Regents, Member
Continuing Students/Completers Subcommittee
Best Practices in Advising Workgroup

Premedical/Predental Advisory Committee, Louisiana Tech University, Chair

UPC and Grade Appeal Committee, College of Applied and Natural Science, Member

Dual Enrollment Coordinator, School of Biological Sciences

Ad hoc Curriculum Committee, School of Biological Sciences, Chair, responsible for creating learning outcomes for the Biology major and a curriculum map for the program

Director's Advisory Committee, School of Biological Sciences, Member

Environmental Science Curriculum Committee, School of Biological Sciences, Member

Ad hoc Unit Assessment Committee, School of Biological Sciences, responsible for Biology major assessment

Faculty Advisor, Louisiana Tech Rock Climbing Association