

2020 Departmental Excellence in Teaching Award Packet

Department of Kinesiology and Sport Management

The mission of the Department of Kinesiology and Sport Management (KSM) is to:

Provide high quality, research-based, and applied educational programs preparing leaders in the fields of kinesiology, sport management, and exercise physiology. Established in 2014, this mission statement has guided curricular enhancements, development of three new degree programs, and hiring of 26 replacement or new faculty. KSM faculty demonstrate consistent and increasing excellence in teaching as demonstrated by high student evaluations, a commitment to continuous improvement in teaching, involvement in the scholarship of teaching and learning, extensive use of a variety of teaching pedagogies, and curricular and program quality.

First Criterion: Efforts to Improve Teaching. KSM offers its full-time and part-time faculty an annual three-hour teaching workshop. This workshop features KSM faculty, members of the TTU Teaching Academy, and staff of the Teaching, Learning and Professional Development Center (TLPDC). The goal of these teaching workshops is to help faculty learn how to use a variety of instructional strategies that have been proven to engage students more actively in their learning. On August 24, 2018, Department Chair **Angela Lumpkin** presented sessions on metacognition with learning, studying and testing strategies, three-part teaching of curriculum design, instructional delivery, and learning assessments, and effective questions strategies. On August 23, 2019, 13 KSM faculty presented on a variety of topics including enhancing student engagement in class discussions, learning progressions, in-class quizzes, case studies, real-world applications, learning analytics, and concept maps. **Diane Nichols**, a part-time faculty member, commented about the department's annual three-hour teaching workshops. *“Dr. Lumpkin holds a teaching workshop each year for the faculty. These workshops are more like “good coaching”*

for success in the classroom. They are very helpful.” Others have commented about how incorporating numerous strategies learned in the annual workshops has improved their teaching.

KSM faculty are evaluated annually if pre-tenured, which 14 out of 23 full-time faculty are, by the Department Chair, another tenured faculty member, or a TLPDC staff member. All new faculty—full-time and part-time—are evaluated in their first semesters and all continuing part-time faculty and one-year appointment instructors are evaluated annually or not later than every three years. The observer reviews the course syllabus and completes a KSM Evaluation of Teaching Form during each class observation. Following the observed class, the faculty member is asked to reflect on the class, meet with the observer to discuss the class, and then the observer provides a written, formative class observation report to the faculty member. Numerous faculty have commented that this process affirms the department’s commitment to continuous instructional growth by each faculty member, which is verified by KSM’s overall student evaluations that always exceed those of the university and College of Arts and Sciences.

Joaquin Gonzales, who supervises the KIN 3306 Applied Exercise Physiology labs for Kinesiology majors, facilitates the use of a peer-mentoring strategy to help Graduate Part-time Instructors (GPTIs) develop new knowledge and skills for teaching labs. He meets with the GPTIs for at least one hour weekly to review, discuss, and practice lab activities to be presented to students the next week. He also communicates with the GPTIs regularly about course reminders, grading questions, and issues related to student absences or other behaviors.

Audra Day, who coordinates the lab instructors for KIN 3368 Exercise Testing and Prescription, meets with GPTIs individually and as a group to help them develop their teaching styles and provides constructive feedback. She has GPTIs design lab presentations and quizzes,

so they have opportunities to be exposed to the requirements of teaching. Once they complete their lectures and quizzes for each week, she reviews the material and gives individual feedback.

In spring of 2020, Ph.D. students, who will be serving as GPTIs in three-credit hour courses in fall of 2020, will complete KIN 7305 College and University Teaching in Exercise Physiology. This course is co-taught by **Melanie Hart**, recipient of a 2013 Chancellor's Council Distinguished Teaching Award, and **Angela Lumpkin**, recipient of a 2019 President's Excellence in Teaching Award. The study of educationally sound curricular design, instructional delivery characterized by interactive lecturing and active learning, and formative and summative assessments of learning in exercise physiology, this course is preparing doctoral students in exercise physiology to teach effectively. One Ph.D. student, Ahalee Farrow, during 2019-2020 is participating in the TLPDC's and Graduate School's TEACH (Teaching Effectiveness and Career enHancement) Program, which is modeled after the national Preparing Future Faculty movement and assists Ph.D. students in developing teaching skills and exploring faculty roles.

Karla Kitten serves as Coordinator of the Personal Fitness and Wellness (PFW) Program and supervises master's degree students in Kinesiology or Sport Management who serve as graduate teaching assistants (GTAs) teaching PFW classes. She provides a teacher training session that includes 1) qualities of effective teaching including strategies and techniques of effective teaching; 2) suggestions and tips on dealing with students with special needs; 3) guidance about building rapport with students (assuming the instructor role rather than student perspective); 4) introduction to departmental policies and procedures; 5) explanation of expectations of their assigned positions; and 6) specific teaching techniques, such as syllabus content, building a lesson plan and course outline, attendance procedures, building tests and quizzes, appropriately addressing students via email, professionalism during class and outside of

class, and first-day procedures. GTAs assisting faculty are mentored by them in successfully completing all assigned duties, which may include grading and assisting during classes. She monitors the work of all GTAs throughout each academic term, offers teaching tips and suggestions to assist in their teaching success, and evaluates them annually.

In spring semester of 2020, KSM is taking a special initiative to improve teaching and learning for its faculty and students. The Transparency in Learning and Teaching (TILT) Higher Ed project, designed and implemented by Mary-Ann Winkelmes, is an award-winning national educational development and research project to help faculty use a transparent teaching framework to promote students' success and especially advancing underserved students' success. TLPDC Executive Director Suzanne Tapp and **Angela Lumpkin** will conduct three, one-hour workshops for KSM faculty and GPTIs to help them learn about and begin using the TILT framework of purpose (i.e., skills to be practiced and knowledge to be gained), task (i.e., clear expectations and directions about how to complete the task), and criteria (i.e., checklist of expectations and examples of what work should look like when it meets expectations).

Heather Vellers believes presentations at the KSM teaching workshops and feedback received during classroom observations have helped her improve her teaching. In KIN 3305 Exercise Physiology, she uses a variety of pedagogical approaches to enhance student learning including explaining how and why all levels of Bloom's Taxonomy are essential to learning. She presents Sandra McGuire's Study Cycle to students at the beginning of each semester to help them learn how to study more effectively. All students are actively engaged through discussing "muddiest points" with peers or answering and/or asking questions. Think-pair-share activities have opened the opportunity for peer-led teaching, so students hear a similar message delivered by her and peers. She assesses her teaching effectiveness by asking students to provide feedback

each class. She ends her lectures five minutes prior to the end of class and to allow students to provide her three-to-five key points learned from the lecture and discussions. She requests key points by cold-calling on students to assess areas students did not clearly understand and correct students with positive reinforcement. She uses these key points on their daily group quiz the next class. After one semester of implementing student-provided daily key points and daily group quizzes, she found student learning was greatly increased, based on exam grades and students' comments. See Appendix B for other examples of faculty efforts in improving teaching.

Second Criterion: Departmental Contributions to Teaching Scholarship. The textbook used in the Texas Tech University PFW Program, *Connect Get Active 3.0*, published by McGraw-Hill Higher Education is authored by **Marc Lochbaum**. This textbook provides quality text, videos, learning experiences, and assessment materials to students and GTAs. Used by several other institutions, this eBook is the largest collection of such materials in higher education and is modestly priced for students. **Jacalyn McComb** is the editor *Health Issues for the Active Female* the textbook used in KIN 5330, which has the same course title as the book. **Angela Lumpkin** has written several textbooks, including *Introduction to Physical Education, Exercise Science, and Sport* (10th ed. and with the 11th edition in press) published by McGraw-Hill, which was chosen by the faculty for use in KIN 1301 Introduction to Kinesiology. Two other of her textbooks, *Modern Sport Ethics: A Reference Handbook* (2nd ed.) and *Practical Ethics in Sport Management*, have been used in SPMT 5325 Ethics and Morality in Sport. She has published over a dozen peer-reviewed articles on the scholarship of teaching and learning. In 2018 she received the Distinguished Sport Management Educator Award from the North American Society for Sport Management. In 2018-2019, she was recognized with a Faculty Spotlight Award by the TLPDC. She also is Chair-Elect of the Executive Council of the TTU Teaching

Academy. In fall of 2019 she participated in TeMPO, Teaching Mentoring through Peer Observation, co-sponsored by the TLPDC and Teaching Academy. The TeMPO Program is facilitates interdisciplinary faculty relationships to discuss teaching and create a culture to foster participation of all departments in consistent and high-quality peer observation and review.

Nida Roncesvalles (2018) and **Audra Day** (2019) received a Lawrence Schovanec Teaching Development Scholarship, which funded attendance at a choice of teaching workshop. In 2019, Audra Day presented how she uses jigsaws and interpreted case study methodology at the TLPDC's Burns Conference. Numerous faculty members attend TLPDC conferences, workshops, and sessions to learn teaching tips and strategies to improve their teaching.

Third Criterion: Variety of Departmental Pedagogical Approaches. KSM faculty use numerous pedagogical approaches to actively engage students and strengthen their learning. In addition to using strategies learned at annual KSM workshops and TLPDC sessions and conferences, KSM faculty share with each other successful assignments, learning activities, and formative assessments. A positive teaching culture pervades our department stimulated by class observations, receipt of positive and formative feedback, maintaining expectations for achieving above the University's and College of Arts and Sciences' averages on student evaluations (see Appendix B for these data), third-year review letters, and mentoring provided by the Department Chair to all new faculty. KSM faculty personally affirm that quality teaching is the expectation and norm in our department with students contributing to this through their helpful open-ended comments via SmartEvals that KSM review and use to make changes in their courses.

One pedagogical approach that differentiates KSM is that all of the courses taught online by KSM faculty complete the rigorous process of course development guided by eLearning staff and receive certification of the excellence of their design of each course. This means that over 40

HLTH, KIN, PFW, and SPMT online courses meet (and often exceed) the highest national standard for online courses, including accessibility. Below are a few specific examples of pedagogical approaches used by KSM faculty, with numerous other examples in Appendix B.

Melanie Hart teaches face-to-face, hybrid, online, and regional site classes. She utilizes technologies available through Blackboard, such as Collaborate Ultra, for synchronous online or regional site classes. Because her administrative responsibilities require her to travel regularly, she uses a telepresence robot to teach classes when away from campus, thus being “present” when not physically in the classroom. The robot allows her to move around the classroom and interact with students. She has implemented PlayPosit in her hybrid class. This software allows for interactivity with the students during a pre-recorded lecture or video. In her face-to-face courses, she asks students to prepare for class ahead of time by telling her what they still do not understand after reading and/or interacting with the preparation materials, which allows her to focus on trouble spots for students without relying on PowerPoint slides. Students say this approach allows them to engage in discussions rather than copy information from slides.

Aaron Arreola brings years of experience and a wealth of expertise as a physical therapist and athletic trainer into his classes, as he helps link students to the varied graduate health sciences programs students segue into after graduation. He requires job shadow experiences in KIN 3346 Anatomical Kinesiology to allow students opportunities to observe first-hand potential career choices. These outside-of-class experiences help students put course content into practice and enable some to obtain jobs, internships, and validation for their future plans. Students engage in threaded discussions that require them to seek research literature via online databases and disseminate their ideas based on learning from their reading about various topics, thus prompting them to become knowledgeable consumers of research literature.

Chris McLeod has changed his assignments and syllabus using the TILT framework. He revised assignments, activities, and content based on student feedback. His teaching strategies include active learning, desirable difficulty, metacognition, and outcome-led learning and course design. His economic impact assignment guides students through increasingly complicated learning outcomes as they use real data to calculate and interpret the economic impact of a sporting event. He led a study abroad course in Spain in summer of 2019. His course content and assignments are created with industry partners (e.g., Morethanbaseball.org, Visit Tallahassee, Auckland Tourism, Events, and Economic Development) to ensure relevant learning.

Audra Day using jigsaw learning, interrupted/hybrid case studies, small projects, and inquiry-based learning strategies with an emphasis on constructivist pedagogy along with teacher-guided learning. She believes collaborative learning best facilitates long-term retention and elevates students' problem-solving skills. Her students consistently evaluate the quality of learning in her classes as excellent.

Fourth Criterion: Programmatic Quality. Dean Brent Lindquist has described KSM changes over the past five years “as revolutionary” and praised KSM’s “advancement of an academic department in curricular enhancements and expansions, demonstration of and dedication to teaching excellence, and visionary leadership in the achievement of strategic goals.” Curricular changes include 1) phasing out physical education teacher education and exercise and health promotion undergraduate tracks and strengthening the science content in the exercise science track; 2) revising the sport management track and obtaining a new B.S. in Sport Management; 3) revising minors in Athletic Coaching (online), Kinesiology, Sport Management, and Health and developing new Public Health (online) and Sports Medicine minors; 4) implementing a 2.5 GPA for Kinesiology and Sport Management majors; 5) revising and focusing graduate

specializations—clinical, human performance, and integrative tracks in exercise physiology and motor behavior/exercise and sport psychology; 6) renaming Exercise and Sport Sciences degrees to B.S. and M.S. in Kinesiology; 7) revising the sport management specialization and obtaining a new M.S. in Sport Management; 8) developing and implementing new undergraduate and graduate degree assessments, which are annually reviewed and revised; 9) obtaining authorization for a new Ph.D. in Exercise Physiology begun in fall of 2018; 10) obtaining approval for two dual degrees (JD and MS in Sport Management) with the School of Law and a MBA and MS in Sport Management with the Rawls College of Business. Clinical exercise physiology students typically increase their job marketability by earning the American College of Sports Medicine’s Clinical Exercise Physiologist certification.

During 2018-2019, the master’s degree programs in Kinesiology and Sport Management completed the Graduate Review Process with a “very good” overall rating. It is noteworthy that all tenured and tenure-track faculty teach both undergraduate and graduate courses, mentor graduate students, and teach all graduate courses, with none taught by part-time faculty.

In the Office of Planning and Assessment’s (OPA) most recent evaluation of assessments of the department’s four degrees (BS in Kinesiology, MS in Kinesiology, BS in Sport Management, and MS in Sport Management), each degree received a perfect 4.0 rating (i.e., highly developed) on all four elements—student learning outcomes, assessment methods, results, and actions for improvement. For each degree, OPA commented, “*Degree program has a strong assessment plan. Results were clear and detailed regarding student learning. Actions for improvement and follow-ups all looked great.*” OPA added, “*Report should be recognized as exemplar for SACSCOC Standard 8.2.a*” **Angela Lumpkin**, who leads the department’s assessment work, was recognized as the Office of Planning and Assessment’s recipient of the fall

2019 Assessment Spotlight. The citation stated: “We applaud you for your responsiveness to our office’s assessment feedback, and we all acknowledge your commitment to improving student learning in all KSM degree programs. We considered many other academic leaders across campus, but we especially note your insistence on the highest of standards in your department’s assessment methods, results, and analysis.” In 2019, **Grant Tinsley** received a Texas Tech Alumni Association New Faculty Award recognizing his quality of teaching and research.

Fifth Criterion: Planned Use of Award Monies. KSM will be initiating a new component in its KIN 3368 Exercise Testing and Prescription course required for all Kinesiology majors in fall semester of 2020. Students will participate, as a transformational educational experience, in a community outreach activity. Specifically, students will conduct numerous, free health assessments for adults in the community and TTU faculty and staff members. After learning how to conduct these assessments in labs associated with this course, all students will spend a portion of lab times providing educational information and conducting health assessments. If KSM is the recipient of this award, \$15,000 of the funds will be used to purchase health assessment disposals, such as test strips and cartridges, and sanitizing supplies, and equipment, including blood lipid and glucose analyzers, stethoscopes, scale, hand dynamometers, blood pressure cuffs, skinfold calipers, and privacy screens. The other \$10,000 (\$400 for master’s students and \$200 for undergraduate students) will be allocated to Sport Management students for reimbursement of some of their expenses for attending learning opportunities, such as the annual National Sports Forum in Atlanta, Georgia, or the Sports Career Day at AT&T Stadium.

Appendix A: Faculty, GPTI, and GTA Information

Number of FTE faculty = 30.88 in fall of 2019

<u>Tenured Professors (5)</u>	<u>Tenured Associate Professors (4)</u>	<u>Assistant Professors (14)</u>
Figueroa, Arturo	Gonzales, Joaquin	Asada, Akira
Hart, Melanie (Vice Provost)	Masset, Michael	Blinch, Jarrod
Lochbaum, Marc	Roncesvalles, Marianida (Nida)	Brown, Katherine
Lumpkin, Angela	Tacon, Anna	Dhurandhar, Emily
McComb, Jacalyn	<u>Part-time Faculty (11)</u>	Harry, John
<u>Assistant Professors of Practice (2)</u>	Brooks, Toby	Luk, Hui Ying
Arreola, Aaron	Diersing, Dean	McLeod, Christopher
Day, Audra	Garcia, Imelda	Palmer, Ty
<u>Continuing Appointment Instructor (1)</u>	Linstrom, Melissa	Pifer, David
Wiedenfeld, Heidi	McKenzie, Vicky	Rivas, Eric
<u>One-Year Instructors (5)</u>	Munger, Larry	Sanderson, Jimmy
Harry, Ashley	Nichols, Deby	Shin, Nari
Kitten, Karla	Nichols, Diane	Tinsley, Grant
Palmer, Bailey	Perez, Frank (fall only)	Vellers, Heather
Smith, Chad	Rieken, Ralph (teaches scuba)	
Villalobos, Alice	Simpson, Bryan (fall only)	

<u>Graduate Part-time Faculty</u> (9 in fall; 7 in spring)	<u>Graduate Teaching Assistants</u> (29 in fall and in spring)	
		Hurwitz, Jacob (spring)
Benoit, Thais (fall only)	Armstrong, Shelby	Lathrop, Andrew
Chowning, Luke	Bruedigam, Haley	Martin, Guilherme (spring)
Farrow, Ahalee	Castleberry, Colten	McAlister, Shalie
Harty, Patrick	Chastine, Jacob	Nunley, Brandon
Krzyszkowski, John	Coilleau, Jolan	Parah, Siddhi
Martinez, Mauricio	Coyle, Cody	Penkert, Karen
Moinuddin, Arsalan	De-Santiago, Damian	Puente, Gwenyth
Salazar, Alejandra (fall only)	Edgar, Danielle (fall)	Rodriguez, Christian
Stratton, Matthew	England, Matthew	Smith, Robert
	Gilliard, Chuck	Sosebee, Lucas
	Gonzales, Christian	Travis, Jordan
	Grabovic, Zachary	Vincent, Bradley
	Hefner, Tristen	White, Sydnie
	Hernandez, Cruz-Edwin (fall)	Williams, Alandra

- Total number of undergraduate majors = **1,712** in fall of 2019: Kinesiology = 1347; Sport management = 365
- Total undergraduate enrollment (semester credit hours) in fall of 2019 = **11,787**
- Total number of graduate or professional majors = **86** in fall of 2019: M.S. in Kinesiology = **33**; M.S. in Sport Management = **41**; Ph.D. = 12
- Total graduate enrollment (semester credit hours) in fall of 2019 = **744**

Appendix B: Other Supporting Materials

Student evaluations (provided below) in the Department of Kinesiology and Sport Management consistently exceed teaching evaluation scores for the College of Arts and Sciences and University.

Spring 2015	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.57	4.61	4.67
2. Overall, the instructor was an effective teacher.	4.44	4.48	4.61
3. Overall, this course was a valuable learning experience.	4.41	4.42	4.59
Fall 2015	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.56	4.58	4.70
2. Overall, the instructor was an effective teacher.	4.43	4.42	4.61
3. Overall, this course was a valuable learning experience.	4.38	4.37	4.58
Spring 2016	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.59	4.62	4.75
2. Overall, the instructor was an effective teacher.	4.46	4.48	4.69
3. Overall, this course was a valuable learning experience.	4.43	4.43	4.66
Fall 2016	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.57	4.59	4.63
2. Overall, the instructor was an effective teacher.	4.43	4.42	4.53
3. Overall, this course was a valuable learning experience.	4.39	4.36	4.49

Spring 2017	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.55	4.61	4.67
2. Overall, the instructor was an effective teacher.	4.41	4.46	4.57
3. Overall, this course was a valuable learning experience.	4.38	4.41	4.52
Fall 2017	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.44	4.43	4.65
2. Overall, the instructor was an effective teacher.	4.24	4.19	4.54
3. Overall, this course was a valuable learning experience.	4.23	4.17	4.49
Spring 2018	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.47	4.46	4.64
2. Overall, the instructor was an effective teacher.	4.28	4.25	4.53
3. Overall, this course was a valuable learning experience.	4.26	4.21	4.47
Fall 2018	University	College	Department
1. The course objectives were specified and followed by the instructor.	4.5	4.5	4.6
2. Overall, the instructor was an effective teacher.	4.3	4.3	4.5
3. Overall, this course was a valuable learning experience.	4.3	4.2	4.5
Spring 2019			
1. The course objectives were specified and followed by the instructor.	4.5	4.5	4.7

2. Overall, the instructor was an effective teacher.	4.3	4.3	4.6
3. Overall, this course was a valuable learning experience.	4.3	4.2	4.5
Fall 2019			
1. The course objectives were specified and followed by the instructor.	4.5	4.5	4.7
2. Overall, the instructor was an effective teacher.	4.3	4.3	4.6
3. Overall, this course was a valuable learning experience.	4.3	4.2	4.5
Five-Year Averages	4.407	4.399	4.593

Additional Examples of Efforts to Improve Teaching and Use a Variety of Pedagogical Approaches

Nida Roncesvalles incorporates a service learning initiative in KIN 3314 Lifespan Motor Development with her students dedicating volunteer hours at a local senior center. She has adapted a flipped classroom method in her courses with the goal of maximizing student learning.

Marc Lochbaum creates a video-based series for his online courses with closed captioning as well as scripts to increase student learning enjoyment. He provides assessments of assigned readings to ensure relevancy for students. He continuously seeks input from students in addition to student evaluations so he can improve his teaching.

Emily Dhurandhar uses an online discussion forum that incorporates artificial intelligence to teach students how to ask good questions and formulate well-researched responses to questions. This entices students to review material outside of class and find something that sparks their curiosity. She uses Poll Everywhere, a free online polling software, to obtain anonymous answers from students on topics on which there may be more than one opinion to initiate class discussions.

David Pifer meets with each student individually twice a semester in SPMT 3373 Sport Communication to provide personalized feedback on their coverage (written, social media, and video) of real-life sporting events. This personalized instruction allows him to better connect with students and equip them with specific skills necessary for jobs in the sport industry.

Grant Tinsley began the department's utilization of a unique software program by students in KIN 3346 Anatomical Kinesiology to visualize human movement in three dimensions. The software allows the actions of specific muscles, muscle groups, and joints to be visualized from multiple angles and helps students understand how isolated actions of individual muscles contribute to complex movements performed daily. Feedback received from students continues to affirm how this software greatly improves their understanding of human movement.

Akira Asada asks students in SPMT 4356 Fundamentals of Sport Marketing to find current events related to sport marketing and analyze the case using concepts and theories discussed in previous lectures. Students complete market research reports by analyzing consumer survey data using mean comparisons and correlations and proposed marketing actions based on the findings. Students in his marketing classes write marketing proposals for a Texas Tech athletic team. Students attend a home game and critically evaluate the quality of their game-day experiences. Additionally, they conduct a survey with students and examine motivations, constraints, consumption experience, satisfaction, competitors, and communication platforms.

Ying Luk in KIN 3305 Exercise Physiology asks students in groups to respond to review questions, brainstorm and discuss possible responses when questions are raised, and complete assignments at the end of each class. Students work with a randomly assigned classmate to answer four questions in class and present it to the class, with the purpose to connect different concepts and apply these to exercise scenarios or current topics in the field while promoting

communication and presentation skills. She uses published research results to present concepts and raise questions to foster students' critical thinking on current topics.

Ashley Harry checks-in with her students at the mid-term point each semester to see what about the class they are enjoying or not and what parts of the course they find challenging. She finds students provide honest feedback and where possible, she makes changes. For example, in the fall semester she changed the way she provided notes for students to take in class. Several students mentioned in their mid-term feedback they struggled with the notetaking based on the outline she provided; so, she provided a second option. Immediately, she noticed more students taking notes and engaging in class and at the end of the semester a few students thanked her for taking their comments to heart. She has found that by valuing their feedback, students trust her more and make stronger commitment to their efforts in class. Another approach she has taken to improve teaching is incorporating more real-world assignments into her classes. For example, in her Sales class, students must create and present a sales pitch for a ticket package for a specific sport organization as if they were really trying to sell the product. This activity is something students would do in a job setting since students in the sport industry start out in sales positions. In her Facilities and Event class, students are required to attend a sporting event and critique different components of the event and provide recommendations to improve the fan experience. Several students have reported that this type of activity is helpful in putting concepts discussed in class into action so they become more realistic and relevant.

Heather Vellers in KIN 7303 Advanced Exercise Physiology II (bioenergetics section) implemented a pedagogical approach that effectively encourages class discussions through student-led teaching assignments. After lecturing for about 60 minutes, she uses the remaining class time for 15-minute student teaching demonstrations related to the lecture topic. Students are

provide 2-3 key points at the end of their demonstration, which they write on a whiteboard, followed by a 10- to 15-minute discussion on key points for each teaching demonstration. The information students present and discuss is included on daily quizzes in the next class. She has found this approach highly effective for Ph.D. students as it actively involves them. Another benefit is it allows students, particularly those that are pursuing a career in academia, to practice synthesizing complex topics and delivering these in succinctly and concisely. After their teaching demonstrations, each student meets with the instructor to discuss positive aspects of their presentations and receive tips for improvement.

Joaquin Gonzales, who a very good teacher, is using feedback received from students in KIN 3306 Applied Exercise Physiology to use more active learning strategies, such as concept maps, jigsaws, brainstorming, Pass It On, and case studies to promote greater student learning. He also is incorporating more animations (videos and animations) to stimulate discussions.

Ty Palmer incorporates examples in classes of how his research may be used to answer practical problems. He demonstrates how his research on muscle strength and aging can be used in clinical and fitness settings to help develop training programs aimed at improving muscle performance for maintenance and/or restoration of locomotor function in the elderly. Students appreciate these examples to help bridge the gap between science and practical application.

Angela Lumpkin uses numerous active learning approaches in all of her Sport Management classes, including think-pair-share, write-pair-share, Poll Everywhere, effective questioning strategies, video clips, and the TILT framework for designing assessments for greater student success. For undergraduate classes, she especially likes to use blogs, concept maps, minute papers, checks for understanding, and Jeopardy review games. In graduate classes she also uses case studies, debates, rotating stations, jigsaws, and Lino with its online canvas for

posting student responses to questions. In KIN 7305 College and University Teaching in Exercise Physiology, she will teach GPTIs about how she uses these learning activities plus how to use fishbowls, exploratory writing assignments, questions on assigned readings, flipped classes, metacognitive strategies, circular responses discussions, and circle of voices.

Audra Day, Emily Dhurandhar, Bailey Palmer, Hui Ying Luk, and Heather Vellers along with Ph.D. student Ahalee Cathey hosted KSM's first workshop as a part of annual Tech Savvy STEM Conference for middle school-aged girls in February. The Tech Savvy STEM Workshop provides participants with hands-on learning experiences about career opportunities in exercise science. KSM Kinesiology majors and KSM Ambassadors helped with this workshop. The middle school girls left with smiling faces and excitement after learning about career options in exercise science.

Three Sport Management undergraduate students, Kenedy Brandon, Nikolas Rizzi, and Daniel Smith, traveled to Atlanta, Georgia, in November of 2019 to compete in the National Collegiate Sports Sales Championship competition. Under the guidance of their instructor **Ashley Harry**, these three Sport Management majors competed against students from 21 other universities in a fast-paced ticket sales competition. Students' participation in this competition showcased the knowledge, skills, and abilities acquired through our Sport Management program. When they arrived at the competition, they met a team from the Rawls College of Business, so they combined into one team. TTU's students won 2nd place overall.

Undergraduate and graduate students work with tenure-track faculty in independent study courses and research in labs. For example, **Grant Tinsley** provides individualized teaching and mentorship to students completing projects in his lab. These students come from a variety of programs, including the Ronald E. McNair Post-Baccalaureate Achievement Program, Honors

College Undergraduate Research Program, and students receiving support from The Center for Transformative Undergraduate Experiences (TrUE). He currently is mentoring six undergraduate and five graduate students as they learn about the process of conducting academic research and gain experience through presenting research at university and professional conferences.

The faculty's labs—which are used for research and teaching—are listed below and described in greater detail including the lab equipment under the Faculty Research tab and each faculty member's name on the KSM webpage at <http://www.depts.ttu.edu/ksm/>.

- Motor Behavior Laboratory directed by **Dr. Jarrod Blinch**
- Human Performance Laboratory directed by **Dr. John Harry**
- Muscular Assessment Laboratory directed by **Dr. Ty Palmer**
- Exercise and Thermal Integrative Physiology Laboratory directed by **Dr. Eric Rivas**
- Biofeedback Laboratory directed by **Dr. Jacalyn McComb**
- Postural Strength and Assessment Laboratory directed by **Dr. Jacalyn McComb**
- Energy Balance and Body Composition Laboratory directed by **Dr. Grant Tinsley**
- Vascular Aging Laboratory directed by **Dr. Joaquin Gonzales**
- Mitochondrial Genetics and Exercise Laboratory directed by **Dr. Heather Vellers** and **Dr. Ying Luk**
- Applied Exercise Physiology Lab directed by **Dr. Ying Luk**
- Dhurandhar Human Energetics Laboratory directed by **Dr. Emily Dhurandhar**
- Vascular Health Laboratory directed by **Dr. Arturo Figueroa**
- Physiological Genomics Laboratory directed by **Dr. Michael Massett**
- Balance Testing Laboratory directed by **Dr. Nida Roncesvalles**

Encouraging Student Research under Guidance of Faculty Mentors. KSM provides \$1000 to tenure-track faculty for presenting their research, including research conducted with students, at professional conferences. KSM also provides \$1,000 to all full-time faculty for professional development, with these funds often used by faculty to improve their teaching. An emphasis among KSM tenured and tenure-track faculty is to engage undergraduate and graduate students in these research labs. Funding to support student research projects is provided by the department using differential tuition. KSM provides \$200 to undergraduate students, \$400 to master's degree students, and \$500 to doctoral students to present their research at disciplinary conferences. Numerous undergraduate and graduate students have published peer-reviewed articles and presented at professional conferences based on their research conducted with faculty mentors. At the Texas American College of Sports Medicine Conference in February, four students mentored by Grant Tinsley made research presentations: Jacob Dellinger; Brian Adamson, who was a finalist and 3rd place winner in the Undergraduate Research category; Marqui Benavides, and Lane Moore, who was a finalist in the Undergraduate Research category. Three students (Chinonye C. Agu-Udemba, Ethan A. Mitchell, and Ahalee C. Cathey), who were mentored by **Ty Palmer** were finalists in the research poster competition. **Eric Rivas** had three students present research in the poster competition including two undergraduate students Kyleigh Allie and Paolo Salvador. Graduate student Julianna Kilpatrick received first place in the master's level competition and was recognized for having one of the top three posters overall.

Classrooms and Laboratories. The classroom and lab environment for students influences their learning. KSM faculty and students benefit greatly by having a building dedicated to their use. KSM also has access to physical activity spaces for PFW classes and classrooms in the Student Recreation Center. KSM classrooms are equipped with up-to-date computers enhanced by

software such as Turning Technologies, Top Hat, and Poll Everywhere, rear projectors, automated screens, and remote clickers. In the summer of 2016, KSM using its own funds renovated its classrooms to improve the student learning environment:

- 170—added a second projector and reduced the number of seats from over 100 to 90.
- 171—divided a classroom that formerly held over 100 to one seating 45 students.
- 169—used the other half of renovated 171 for development of a distance classroom equipped with cameras, whole-room microphones, a rear television monitor, four consultation stations for group work using technology, equipment for hearing-impaired students, and a lapel microphone. **Melanie Hart, Karla Kitten, and Bailey Palmer** have taught students synchronously in this classroom and on the Waco campus.
- 173—this cramped classroom was renovated into a student computer lab with 17 work stations and tables for studying and using laptops. This lab can be reserved for classes needing use of several work stations and access to SPSS, a statistical software package.
- 175—this former student computer lab was renovated to provide a 28-seat classroom. First priority usage for this classroom is for teaching KIN 3305 Exercise Physiology. This first-level exercise physiology course, which is a prerequisite to several other courses in the Kinesiology major, is now limited to a 28-student enrollment to help students gain a solid foundation in their major and increase students' academic success.
- KSM uses differential tuition funds to provide excellent laboratory equipment and supplies for all courses, including for Personal Fitness and Wellness (PFW) courses. KSM has added greater wireless capacity to the classroom wing and research labs of the Kinesiology and Sport Management Building so all students working throughout the building can access the Internet, even all at the same time.