Texas Tech University
Academic Council
Meeting of January 20, 2015

1:30 PM, Library 309

AGENDA

1. Minutes of the December meeting (attached)
   Mark Sheridan, Vice Provost for Graduate and Post-Doctoral Affairs and Dean of the Graduate School -- Review of Graduate Program Proposals
2. Update on Student Success Collaborative (J. Barron)
3. Academic Program Proposal: Master of Science in Chemical Biology (Roach; attached)
4. Change in Transfer Requirement for the Rawls College of Business (Goebel, Carnes)
5. Proposed Change of Name: Department of Theatre & Dance to School of Theatre & Dance (A. Martin, Durham; attached)
6. Course Approvals (McKinnon; attached)
7. Last Day to Withdraw in Fall Terms (Brown, Durham; attached)
8. Website Guiding Proposals for New Programs (Durham)
9. Core Curriculum and Writing Intensive Submission Deadlines (Durham)
10. Brief update on SACSCOC Focused Report, QEP, and On-site Visit (Parsoneault)
11. Other Business

Adjourn by 3:00 PM

ACADEMIC COUNCIL
Texas Tech University

Meeting of
December 16, 2014

MINUTES

Present: Cindy Akers, Kathy Austin, Bobbie Brown, Adrienne Carnes, Cathy Duran, Genevieve Durham DeCesaro, Keith Dye, Stephen Ekwaro-Osire, Clifton Ellis, Cliff Fedler, Paul Goebel, Sheila Gray for Ethan Logan, Sheila Hoover, Lynn Huffman, Jorge Iber, Peggy Johnson, Michelle Kiser, Robin Lock, Justin Louder, Andrew Martin, Randy McBee, Pat McConnel, Garrett McKinnon, Richard Meek, Ben Montecillo, Audra Morse, Alison Myhra, Catherine Parsoneault, William Pasewark, David Roach, Brian Shannon, Brian Steele, Rob Stewart chair, Kevin Stoker, Janessa Walls, Vicki West, Aliza Wong

Guests: Jennifer Bard, Coy Callison, Todd Chambers, Angela Lumpkin, Brenda Martinez, and Nicci Price

Stewart called the meeting to order. The minutes from the November Academic Council meeting were presented. Huffman moved to approve as presented, Akers seconded, and the motion was carried by acclamation.

Durham DeCesaro introduced a proposal to modify the Writing Intensive language in the official catalog. An update of a proposal first broached during the November meeting, the proposal broadened the language to include any interdisciplinary program. Morse moved to approve the new language, Iber seconded, and the motion was approved.

Durham DeCesaro also introduced a proposal to implement a policy change for course change approval, as well as implementing a formal timeline for acceptance of course and prerequisite changes. She presented a table featuring specific deadlines for various actions. In conjunction with this timeline, Martinez presented an update of the course review site, and explained that colleges would soon be able to log on and review specific course requirements, such as prerequisites, and make changes via the new site. After some discussion, the Council agreed via voice consensus to implement the changes.

Durham DeCesaro introduced a policy change to the College of Education teacher certification process, whereby students would use a primary catalog relative to their individual major, and a secondary catalog relative to their acceptance into the teacher education program. Huffman suggested a minor textual change to the policy, whereupon Morse moved to approve the policy change as amended. Johnson seconded, and the motion was approved.

Durham DeCesaro updated the Council members on the activities of the Section Uniformity Working Group, and solicited volunteers to assist the group.

Stoker presented a proposal for an MA in Strategic Communication and Innovation. The 30-hour program would start in Fall 2015 and feature online delivery. Stoker added that current Communication Studies faculty would be tabbed to teach the courses, which could possibly be cross-listed as MCOM and COMS. Morse moved to approve the degree as presented, Huffman seconded, and the motion was approved.

McKinnon presented the course approvals summary. Akers requested that items 64 and 65 (MCOM 5326 Risk Communication/Management and MCOM 5328 Crisis Communication) be tabled pending discussions between the Colleges of Agriculture Sciences and Natural Resources and Media and Communication regarding possible commonality between existing courses in CASNR. Chambers requested that item 9 (ESS 3373 Sport Communication) be tabled pending additional discussions between the College of Media and Communication and the College of Arts and Sciences. After discussion regarding a disagreement regarding that proposed course, as well as disagreement between Arts and Sciences and the College of Human Sciences regarding item 25 (NS 2330 Nutrition for Health, Fitness and Sport), Stewart mandated removal of both courses from consideration pending a final solution. Following a brief follow-on discussion, Meek moved to approve the courses that had not been tabled, Morse seconded, and the motion was approved.

Roach presented an informational item regarding an online minor in Public Health. He noted the College of Arts and Sciences believes the minor to be a good lead-in to a master's degree in public health, serving as a feeder program of sorts.

Johnson followed with an informational item regarding a minor in Quantitative Methods, applicable specifically to education. She noted that all the courses required for the minor already existed.

Parsoneault presented an update on the SACSCOC Focused Report, as well as results from the onsite visit with the chair of Texas Tech University's reaffirmation committee at SACSCOC. She noted that Texas Tech was among the first universities to complete a QEP, and would be one of the first to develop a second such initiative while maintaining the first. Parsoneault said the Focused Report was being prepared to address any perceived gaps or insufficiencies in compliance certification, and that the final Focused Report and QEP were expected to be sent the week of January 16.

Stewart gave a debrief of the fall commencement ceremonies, and commended faculty attendance at the events.

In other business:

- The Department of Communication Studies presented a notification that the MA in Communication Studies would see a reduction in the required credit hours to 33 from 36.
- Rawls College of Business presented a notification that the MS in Business Administration (Statistics Option) would see a reduction in the required credit hours to 30 from 36. The reduction would be accomplished by deleting the leveling courses requirement.
- Rawls College of Business also presented a notification that the Essentials of Business graduate certificate would see a reduction in the required credit hours to 12 from 15.
- Stewart noted that in the future all such program hour change requests should be presented via appropriate THECB forms in an effort to streamline the process.
- Finally, Stewart commended the Council for the amount of business accomplished during meetings in the fall semester, specifically citing the Council's greater critique and analysis of academic changes.

With no other business on the agenda, Stewart adjourned the meeting.

Notification Form for Administrative Changes
Texas Higher Education Coordinating Board

Directions: An institution shall use this form to notify the Board of an administrative change.

Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Administrative Information

1. Institution: Texas Tech University

2. Description of Administrative Change: (*e.g., create a new Department of Sociology; merge existing College of Science and College of Liberals Arts into a new College of Arts and Science, etc.)*

Change the name of the **Department of Theatre & Dance** to the **School of Theatre & Dance**, and the corresponding titles of administrative personnel from "Chair" to "Director". The department is one of three units within the College of Visual and Performing Arts, along with the School of Art and the School of Music.

3. Program Inventory – Show how the change would appear on the Coordinating Board's Program Inventory. Include all degree programs and corresponding Texas CIP codes affected by the change but do not include proposed administrative unit codes for the new academic unit(s). Board staff will assign the new administrative unit codes.

The change would not appear in the Program Inventory, as it currently lists the institution's name and the program name, but not the administrative unit name. Dance CIP: 50.0301.00 (BA); Theatre Arts CIP: 50.0501.00 (BA, BFA, MA, MFA); Fine Arts CIP 50.0101.00 (PhD).

4. Implementation Date: (MM/DD/YY) 08/19/15

5. Phase Out Date (if applicable): (MM/DD/YY) 08/19/15

6. Contact Person: Provide contact information for the person who can answer specific questions about the program.

Name: Dr. Mark Charney

Title: Chair, Department of Theatre & Dance

E-mail: mark.charney@ttu.edu

Phone: (806) 834-1683

January 2015 Academic Council
Summary of Proposed Course Approvals

UNDERGRADUATE and LAW COURSE PROPOSALS

No.	College	Action	Prefix & No.	Title	HRS	Activity	Description/Term/CIP/Level
1	AS	CHG title and description	ECO 3326	**Current**: Industrial Organization, Antitrust, and Regulation **Proposed**: Industrial Organization and Competitive Strategy	3:3:0:0		**Proposed Description**: Prerequisite: ECO 2301. Analyzes strategic behavior firms in imperfectly competitive markets. Includes price discrimination, price fixing, price wars, oligopoly, entry deterrence, mergers, and vertical restraints. **Current Description:** Prerequisite: ECO 2301. Combines the latest theories with empirical evidence about the organization of firms and industries. Particular attention is paid to antitrust and regulation issues. **Justification**: This is a name change of an existing course to better reflect the content and topics covered in the course. The department previously offered the course with the title "Industrial Organization, Antitrust, and Regulation." However, there was simply too much important material on the topic to cover in a single semester on both the "Industrial Organization" side and the "Antitrust and Regulation" side, and it was only possible to scratch the surface on the latter. To remedy this problem the department wants to add a second course to cover material on the antitrust and regulation side, focusing on industrial organization (and competitive strategy), and rename this course to accurately reflect its scope. **Effective Term: Summer 2015** **CIP Code: 45.0601.0001**
2	AS	ADD	ECO 3327	Antitrust Law and Economic Regulation	3:3:0:0	LEC	Competition strategy and legal limits on what firms can and cannot do when competing. In-depth review of antitrust laws and full-blown economic regulation**.** **Justification**: This new course will present material on U.S. antitrust and regulatory policy that could not be adequately covered in the previous course entitled "Industrial Organization, Antitrust, and Regulation." The department is seeking to rename that other course as "Industrial Organization and Competitive Strategy" and spinoff the regulation and antitrust topics to this new course. The two courses will together make up the industrial organization/antitrust/regulation sequence in economics. **Effective Term: Summer 2015** **CIP Code: 45.0601.0001**
3	AS	ADD	ECO 3356	Energy Economics	3:3:0:0	LEC	Prerequisites: ECO 2301 and 2302 or consent of instructor. Application of economic models to current local and global energy markets with an emphasis on evaluating policies. **Justification**: This course will focus on the main aspects of energy markets and provide analytic foundation for energy policy analysis. Energy is an essential sector in the economy with fundamental linkages to economic development and social welfare. Students will learn about different sources of energy and the production of energy, and they will construct economic models that involve energy. They will also study energy market regulations and the economic reasoning

							behind such regulations. Upon completion of the course students will have an understanding of the main concepts and energy market regulations. Also, they will be able to apply economic models and policies that involve energy, and analyze energy market regulations. Currently the department does not have a formal course in energy economics. Due to increased enrollment and relevance this course will offer an attractive alternative elective for economics majors and minors as well as students from other departments and colleges. **Effective Term: Summer 2015** **CIP Code: 45.0602.0001**
4	AS	ADD	ESS 2199	Practicum in Athletic Training	1:0:1:0	PRC	Student athletic trainers will gain knowledge and practical skills working with intercollegiate athletic teams under the supervision of certified athletic trainers. **Justification**: Students who work as volunteers with intercollegiate athletics will earn academic credit for their volunteer hours while gaining extensive knowledge and skills working under the supervision of certified athletic trainers. **Effective Term: Summer 2015** **CIP Code: 31.0501.0002**
5	AS	ADD	ESS 3324	Teaching Physical Activities and Sports	3:3:0:0	LEC	Theory, practice, and instructional methodologies appropriate for teaching physical activities and sports in elementary and secondary school settings. **Justification**: The department's faculty has revised the athletic coaching minor to better prepare students, especially teacher education students, who also are interested in coaching. This proposed course will teach students instructional strategies for physical activities and sports as well as give them the opportunity to practice these skills with school students. **Effective Term: Summer 2015** **CIP Code: 13.1314.0004**
6	AS	ADD	GEOL 4310	Planetary Geology	3:2:0:3	LEC	Prerequisites: GEOL 3401, GPH 3300. An introduction to the solid bodies of the solar system beyond Earth, with an emphasis on surface processes and landforms. **Justification**: The department does not have any formal course offerings in planetary geology. Due to high enrollment there is a need for additional geoscience electives for the majors and minors. **Effective Term: Summer 2015** **CIP Code: 40.0601.0002**
7	AS	ADD	HIST 3312	Presidential Politics from Kennedy to Reagan	3:3:0:0	LEC	Explores developments and transformations in Americans' political attitudes, values, ideologies, and behaviors, seen through the lens of modern presidential politics. (US) **Justification**: The department does not currently offer an upper-division course on modern American politics that is not writing intensive (i.e., a 3000-level course). There is significant interest in this topic, especially during presidential election cycles, which — thanks to the proliferation of media — are increasingly long (typically beginning immediately after midterm elections). The course works well for history majors who minor in political science as well as political science majors who minor in history and also contributes to a departmental strength in Cold War Era studies. **Effective Term: Fall 2015** **CIP Code: 54.0102.0001**

8	AS	CHG title, description	HIST 4312	**Current**: American Political Culture **Proposed**: The Rise of Modern American Conservatism	3:3:0:0		**Proposed Description**: Prerequisite: Junior standing. Explores the causes and consequences of modern American conservatism's popular and electoral ascendancy between 1932 and the present. (Writing Intensive) (US) **Current Description**: Prerequisite: Junior standing. Explores developments and transformations in Americans' political attitudes, values, ideologies, and behaviors as expressed at various points in the nation's history. (Writing Intensive) (US) **Justification**: This course has previously been titled "American Political Culture," but according to observations made by both the instructor and the department's academic advisor, this title doesn't resonate with undergraduate students, nor does it fully explain how the course is typically taught. "The Rise of Modern American Conservatism" is both a more accurate reflection of what the course actually teaches, in addition to being a more marketable title aimed at attracting more students. Additionally, there does not currently exist a 4000-level course on American conservatism, despite this being one of the trendiest research areas in all of U.S. history since at least 2001. **Effective Term: Fall 2015** **CIP Code: 54.0102.0001**
9	AS	DEL	HLTH 4312	Psychosocial Health	3:3:0:0		Prerequisite: Junior standing. The role of psychological, social, and stress-related factors in health, illness, and recovery processes, including mental, emotional, social, and spiritual aspects of well-being. (Writing Intensive) **Justification**: This course is being replaced by a combined course, HLTH 4313. **Effective Term: Summer 2015** **CIP Code: 31.0505.0014**
10	AS	ADD	HLTH 4398	Health Seminar	3:3:0:0	SEM	Prerequisite: Senior standing. Selected topics in health. May be repeated for credit with different seminar topics. **Justification**: Rather than using the ESS seminar number, a course focusing on health topics may be offered as the need arises. Each time the course is taught, a unique syllabus with student learning outcomes, readings, and assessments will be developed. **Effective Term: Summer 2015** **CIP Code: 31.0501.0002**
11	AS	CHG hours, number	POLS 3310 to POLS 3410	Introduction to Political Analysis	3:3:0:0 to 4:3:0:1		Survey of methods of and approaches to the study of politics and their underlying assumptions as they apply to the major concepts of the discipline. **Justification**: Instructors in the class spend considerable time in the computer lab training students in statistical methods. Adding a lab hour reflects existing practice and awards credit for time devoted to the subject. **Effective Term: Fall 2015** **CIP Code: 27.0501.1002**
12	AS	ADD	PSY 3390	Introduction to Positive Psychology	3:3:0:0	LEC	Provides an introduction to positive psychology constructs, topics, theories, contexts, and applications. **Justification**: Positive psychology is a major sub-field of psychology that attracts a diverse set of research efforts and professional applications. New graduate programs across the world are being devoted to training in this area, and millions of dollars have been awarded to research in this area from the NIH, NIMH, and U.S. military organizations (among others). Positive psychology topics cut across many of the department's program areas, and courses in positive

							psychology at peer universities attract large enrollments. The popularity and relevance of this subfield for professionals in psychology suggests that education and exposure to this topic at the undergraduate level is relevant and beneficial to students to prepare them for the breadth of career options available post-graduation. **Effective Term: Summer 2015** **CIP Code: 42.2813.0001**
13	BA	ADD	ENCO 4354	Oil and Gas Acquisitions and Divestitures	3:3:0:0	LEC	Prerequisites: ENCO 3301 with a minimum grade of C or higher. Strategies, tactics, and agreements utilized in acquisition/disposition of producing properties. **Justification:** While most people think oil and gas companies focus exclusively on drilling for reserves, in reality, particularly in times of low price environment, there is an equal or greater amount of acquisition and divestiture of producing properties. Students must have a grasp of the importance of this segment of the industry in order to be useful employees in this industry. **Effective Term: Summer 2015** **CIP Code: 52.0101.0016**
14	EN	ADD	CS 4380	Embedded Systems	3:3:0:0	LEC	Introduction of special purpose embedded processor-based systems and their applications. **Justification:** Course is an elective course that has previously been taught as a special topics course and is in rotation to be taught again. Last taught in Spring 2014 with 11 students enrolled. **Effective Term: Summer 2015** **CIP Code: 11.0701.0006**
15	EN	ADD	ME 4377	Innovation, Discovery and Commercialization	3:3:0:0	LEC	Develops and applies specialized, real-world, interdisciplinary opportunity creation and discovery skills to technology commercialization using integrated processes for projects with technical and business content. **Justification:** This course develops entrepreneurial creation and discovery skills with a focus on applying those skills to real-world situations by introducing concepts and skills associated with evaluating commercialization possibilities. It examines technology commercialization from a technology investor's point of view so that class participants can learn to see the technology from both development (e.g. engineering) and business points of view. The course addresses keys to successful technology investing, analysis of the management, investigating the processes; and HR, design/production, etc., analysis of the financial and projections, negotiating and deal commitment, legal issues, exits, and the "due diligence process" (e.g. questions used in venture capital investigations.) **Effective Term: Summer 2015** **CIP Code: 14.1901.0006**
16	HS	CHG hours	CFAS 2300	Communication, Civility, and Ethics	3:3:0:1 to 3:1:0:2		Provides students with a basic understanding of proper communication, civility, and ethics within professional and personal settings. Fulfills core Communication (Oral) requirement. **Justification**: The course has successfully utilized a mass-lecture and breakout discussion model in the past, and the department would like to return to that model. Students will meet once a week in a large lecture and then twice a week in small breakout discussions. **Effective Term: Fall 2015** **CIP Code: 51.1504.0014**

17	HS	ADD	HUSC 4000	Individual Study in Human Sciences	V1-6	IND	Prerequisite: Consent of instructor. Topics will vary to meet curriculum needs of students in interdisciplinary/human science programs. **Justification**: This course will provide up to 6 hours of credit for upper-level students enrolled in interdisciplinary and/or human sciences programs. Topics will vary to address curriculum needs of students. **Effective Term: Summer 2015** **CIP Code: 19.0101.0007**
18	HS	CHG title, description	RTL 2340	**Proposed**: Retail Consumer Behavior **Current**: Contemporary Issues in Retailing	3:3:0:0		**Proposed Description:** Introductory survey of fundamental principles in consumer behavior that affect retailing. F.S. **Current Description**: Introductory survey of fundamental principles and current issues that affect retailing; emphasis on related influences from government, economics, technology, and society. F, S. **Justification**: In review of the B.S. in Retail Management curriculum, adjustments are being made. The new title and description better identify the content of the course. **Effective Term: Fall 2015** **CIP Code: 52.1803.0016**
19	HS	CHG title, description	RTL 4335	**Proposed**: Practices in Web-based Retail Management **Current**: Managing Online Retailing	3:3:0:0		**Proposed Description:** Practices in web-based retail management and development of web-based resources. **Current Description**: Studies online retailing practices and development of an online website. **Justification**: In review of the B.S. in Retail Management curriculum, adjustments are being made. The new title and description better identify the content of the course. **Effective Term: Fall 2015** **CIP Code: 52.1803.0016**
20	HS	CHG title, description	RTL 4340	**Proposed**: Entrepreneurship: Retail Business Planning **Current**: Fashion Entrepreneurship: Retail Business Planning	3:3:0:0		**Proposed Description:** Basic principles, concepts, and practices in retail entrepreneurship. F, S, SS. **Current Description**: Basic principles, concepts, and practices in fashion entrepreneurship. F, S, SS. **Justification**: In review of the B.S. in Retail Management curriculum, adjustments are being made. The new title and description better identify the content of the course. **Effective Term: Fall 2015** **CIP Code: 52.1803.0016**

GRADUATE COURSE PROPOSALS

No.	College	Action	Prefix & No.	Title	HRS	Activity	Description/Term/CIP/Level
21	AS	ADD	ANTH 5310	Seminar in Cultural Resource Management	3:3:0:0	SEM	Seminar covering the practice of cultural resource management archaeology in the United States, including historical and legal background, business models, methods, and employment opportunities. **Justification**: In recent anthropology graduate program reviews, a major criticism was that many courses have historically been taught as a topic under ANTH 5343. The review recommended creating new courses for those topics that are frequently taught. This course is required of students specializing in cultural resource management. **Effective Term: Summer 2015**

							CIP Code: 45.0301.0001
22	AS	ADD	ANTH 5642	Advanced Field Archaeology **Note:** Taught in tandem with ANTH 4642, Field Archaeology; no syllabi provided.	6:6:0:0	PR	Field school providing instruction in crew supervision and advanced archaeological field techniques, including site survey, excavations, record keeping, TDS mapping, and photography. **Justification**: In recent anthropology graduate program reviews, a major criticism was that many courses have historically been taught as a topic under ANTH 5343. The review recommended creating new courses for those topics that are frequently taught. This course will be a practicum for graduate students attending one of the archaeological field schools. **Effective Term: Summer 2015** **CIP Code: 45.0301.0001**
23	AS	ADD	ECO 5350	Behavioral and Experimental Economics	3:3:0:0	LEC	Prerequisite: ECO 5312 or consent of instructor. Shows developments in the testing of economic theory through experiments with a strong emphasis on behavioral models/phenomena in explaining economic decision-making. **Justification**: The Department of Economics currently does not have a graduate course in experimental/behavioral economics. However, the discipline is moving in the direction of both laboratory and field experiments as mechanisms for analyzing economic decision-making. Moreover, the more traditional models in economics are being tested through the use of a multi-disciplinary lens, which has colloquially become known as behavioral economics. These tools and paradigmatic changes within the discipline have taken some time to reach the classroom, but significant resources have been developed to teach both behavioral and experimental economics and their applications at both the undergraduate and graduate levels through hands-on experimentation that can be conducted on a student's laptop/tablet. **Effective Term: Summer 2015** **CIP Code: 45.0602.0001**
24	AS	ADD	ECO 5356	Advanced Topics in Energy Economics	3:3:0:0	LEC	Prerequisite: ECO 5317 or consent of instructor. Students will use economic models to analyze current local and global energy markets from both theoretical and empirical perspectives. **Justification:** This course will provide analytic foundation for understanding and analyzing energy policies and regulations. Energy is a key sector in industrial economies and also an important factor in environmental issues. It also has national security implications because of uneven allocation of energy resources around the world. Students will analyze the economic determinants of energy industry, the associated policy formulation challenges, and proper government intervention for energy market regulations. They will also utilize economic models to analyze energy problems and their impact on economic activity. After the completion of the course, students will have an understanding about the energy-economy linkage, and they will be able to develop and apply appropriate economic models to analyze the economic impacts of existing and proposed energy policies and regulations. Currently the department does not have a course in energy economics. This course will supplement the course offerings for graduate students who want to have a specialization in "Natural Resource and Environmental" economics.

							Effective Term: Summer 2015 **CIP Code: 45.0602.0001**
25	AS	DEL	ESS 5341	Curriculum and Instruction in Physical Education and Sport			An examination of contemporary curriculum and methodologies for effective instruction in physical education and sport. **Justification**: The department has decided to no longer offer a graduate specialization in curriculum and instruction. **Effective Term: Summer 2015** **CIP Code: 31.0505.0014**
26	AS	DEL	ESS 5343	Applied Research in Physical Education and Sport			Prerequisite: ESS 5315 or consent of instructor. Survey of physical education and sport research focusing on contemporary issues. In-depth study of systematic observation of teaching and learning. **Justification**: The department has decided to no longer offer a graduate specialization in curriculum and instruction. **Effective Term: Summer 2015** **CIP Code: 31.0505.0014**
27	AS	DEL	ESS 5347	Practicum in Teaching Physical Education and Sport			Supervised laboratory and field experience in schools and community agencies. **Justification**: The department has decided to no longer offer a graduate specialization in curriculum and instruction. **Effective Term: Summer 2015** **CIP Code: 31.0505.0014**
28	AS	ADD	HIST 5321	Family, Gender, Race, and Empire	3:3:0:0	SEM	Explores the influence of imperial expansion and colonialism on familial ties, gender roles, racial identity, and sexuality. **Justification**: Currently, the Department of History does not offer any courses at the graduate level that explicitly focus on imperialism and colonialism during the early modern period. Yet, from 1500-1800 small European countries expanded their realms to encompass much of the globe. This course explores the most recent and innovative scholarship being produced about early modern empires: studies of the family, gender, sexuality, race, and ethnicity. During the past 15 years, theoretical works on gender, sexuality, and race, in particular, have transformed historical approaches to imperialism and colonialism. Over the past few years, the family, broadly conceived of as a category, a network, and a set of relationships, has emerged as one of the most innovative ways of studying empire. Regardless of what time period or geographic area they focus on, this course will offer graduate students new approaches to the study of empire. **Effective Term: Summer 2015** **CIP Code: 54.0199.0101**
29	AS	ADD	PSY 5335	Group Processes and Intergroup Relations	3:3:0:0	SEM	Explores the processes that occur within and between groups, e.g., social identity, social exclusion, and prejudice. Emphasis is on current theory and research. **Justification**: Group processes and intergroup relations is an essential component for training doctoral students in the department's social specialization. This course has been taught recently as a topic of PSY 5001, and making it a dedicated course will strengthen the doctoral program. **Effective Term: Summer 2015** **CIP Code: 42.2707.0001**

30	AS	ADD	PSY 5465	Categorical Data Analysis	4:3:0:2	LEC	Prerequisites: PSY 5447 and 5480 (or equivalents). Analysis of categorical variables, including contingency table analysis, linear regression models, and repeated-measure designs. **Justification**: This course will be part of the Graduate Certificate in Psychological Methods and Analysis that focuses on analytical methods and approaches. It will strengthen the training within the doctoral program. **Effective Term: Summer 2015** **CIP Code: 42.2708.0001**
31	AS	ADD	PSY 5485	Psychometric and Item Response Theory	4:3:0:2	LEC	Prerequisites: PSY 5447 and 5480 (or equivalents). Overview of psychometric theories and concepts in the field of psychology and related disciplines. **Justification**: This course will be part of the Graduate Certificate in Psychological Methods and Analysis that focuses on analytical methods and approaches. It will strengthen the training within the doctoral program. **Effective Term: Summer 2015** **CIP Code: 42.2708.0001**
32	AS	ADD	PSY 5490	Computer Modeling: Applied Analysis and Simulation	4:3:0:2	LEC	Prerequisites: PSY 5447 and 5480 (or equivalents). Computational and simulation-based methods to develop principled solutions to novel data analytic problems. **Justification**: This course will be part of the Graduate Certificate in Psychological Methods and Analysis that focuses on analytical methods and approaches. It will strengthen the training within the doctoral program. **Effective Term: Summer 2015** **CIP Code: 42.2708.0001**
33	AS	ADD	PSY 5495	Hierarchical Linear Modeling	4:3:0:2	LEC	Prerequisites: PSY 5447 and 5480 (or equivalents). Instruction in interpreting and conducting research in the field of psychological sciences using hierarchical linear modeling. **Justification**: This course will be part of the Graduate Certificate in Psychological Methods and Analysis that focuses on analytical methods and approaches. It will strengthen the training within the doctoral program. **Effective Term: Summer 2015** **CIP Code: 42.2708.0001**
34	AS	ADD	PSY 5496	Qualitative Research Methods and Analysis	4:3:0:2	LEC	Prerequisites: PSY 5447 and 5480 (or equivalents). Introduces students to the ethical, philosophical, and methodological considerations for qualitative research in the field of psychology. **Justification**: This course will be part of the Graduate Certificate in Psychological Methods and Analysis that focuses on analytical methods and approaches. It will strengthen the training within the doctoral program. **Effective Term: Summer 2015** **CIP Code: 42.2708.0001**
35	AS	ADD	SPAN 5383	Spanish in Contact with Other Languages	3:3:0:0	LEC	Introduces students to the dynamic nature of bilingualism in the Spanish-speaking world. Topics include childhood/adult bilingualism, borrowing, and code-switching. May be repeated for credit. **Justification**: To be competitive in the workforce, current Spanish graduate students need to be familiarized with linguistic concepts related to language acquisition/bilingualism in general. More specifically, students who take this course will benefit from better understanding the dynamic nature of Spanish in contact with other languages, an important issue in language education. Although

							Spanish in contact with English in the United States is a hallmark example of language contact phenomena, students will also examine Spanish in contact in different contexts (e.g., Spain, Latin America, the United States, Canada, the United Kingdom, Australia, and New Zealand) . Students will gain a comprehensive understanding of the principal issues and challenges related to the formal study of bilingualism in the Spanish-speaking world. **Effective Term: Summer 2015** **CIP Code: 16.0905.0001**
36	AS	ADD	SPAN 5384	Acquisition and Development of Skills in Spanish as a Second Language	3:3:0:0	SEM	Offers graduate students the possibility to explore and work on projects related to Spanish language skills such as writing, speaking, reading and listening. May be repeated for credit. **Justification**: There is a need for a course that introduces Spanish graduate students to the impact of language skills, such as speaking or writing, on the acquisition of Spanish as a Second Language. The objective of this course is two-fold: a) this course, theoretical and research in nature, will present topics that allow graduate students to begin with research studies that can later be used as M.A. thesis and dissertation topics as well; and b) this course offers the possibility to observe lower-level Spanish courses taught at Texas Tech, thus increasing the potential for changes in the lower-level curricula, which will directly benefit the Spanish program as well as graduate students' knowledge of institutional decisions about language and their influence of second language acquisition. **Effective Term: Spring 2016** **CIP Code: 16.0905.0001**
37	BA	CHG title, description	ISQS 5341	**Proposed**: Big Data Strategy **Current**: Business Problem Solving	3:3:0:0		**Proposed Description**: Theory and practice of using data to crate competitive advantage. **Current Description**: Prerequisite: Admission to M.S. in Management Information Systems program or consent of instructor. Problem solving and decision making for business analysis, reengineering, and competitive advantage. Topics include ERP systems and system security risk assessment. May be repeated for credit with instructor consent. **Justification**: The department would like to update the course to better describe the topics that are taught. The new description will facilitate understanding of the degree program by potential students and employers. **Effective Term: Summer 2015** **CIP Code: 52.1201.0016**
38	BA	CHG title, description	ISQS 6337	**Proposed**: Scripting Languages **Current**: Business Programming Languages	3:3:0:0		**Proposed Description**: Survey of current business analytics scripting languages. **Current Description**: Concepts of data structures and file processing as they relate to information systems. Emphasis on structured and object-oriented program design using Java. **Justification**: The department would like to update the course to better describe the topics that are taught. The new description will facilitate understanding of the degree program by potential students and employers. **Effective Term: Summer 2015** **CIP Code: 52.1301.0016**

39	BA	CHG title, description	ISQS 6339	**Proposed**: Business Intelligence **Current**: Data Management and Business Intelligence	3:3:0:0		**Proposed Description**: Prerequisite: ISQS 6338. Data warehousing, including extracting, transforming, loading, creating data warehouses, cubes, dimensional data modeling, techniques for managing large data sets, unstructured data sets, distributed data sets, and non-relational datasets. **Current Description**: Prerequisite: ISQS 6338. Covers skills, methodologies, and knowledge for data management with BI techniques such as dimensional data modeling, data warehousing, and OLAP. **Justification**: The department would like to update the course to better describe the topics that are taught. The new description will facilitate understanding of the degree program by potential students and employers. **Effective Term: Summer 2015** **CIP Code: 52.1201.0016**
40	BA	CHG title, description, prerequisite	ISQS 6347	**Proposed**: Data and Text Mining **Current**: Data and Text Mining for Business Intelligence	3:3:0:0		**Proposed Description**: Prerequisites: ISQS 6339 and 6348. Classification modeling (decision trees, logistic regression), clustering (including the application to marketing), association analysis, machine learning (AI related methods), neural networks, text and web mining. **Current Description**: Prerequisite: ISQS 5345 or consent of instructor. Examples and methods of data and text mining to produce enterprise intelligence. Use of data and text mining software. **Justification**: The department would like to update the course to better describe the topics that are taught. The new description will facilitate understanding of the degree program by potential students and employers. **Effective Term: Summer 2015** **CIP Code: 52.1301.0016**
41	BA	CHG title	ISQS 6349	**Proposed**: Predictive Analysis **Current**: Advanced Business Forecasting	3:3:0:0		Prerequisite: ISQS 5347. Forecasting methods for business and econometrics. Smoothing, autocorrelations, spectra autoregressive, MA and ARMA models, Box-Jenkins and REGARMA models. **Justification**: The new title will more clearly reflect the aims of the course. **Effective Term: Summer 2015** **CIP Code: 52.1301.0016**
42	BA	CHG title, description, prerequisite	ISQS 7339	**Proposed**: Prescriptive Analytics **Current**: Business Analytics	3:3:0:0		**Proposed Description**: Prerequisites: ISQS 6339 and either ISQS 6348 or 6349. Methods for understanding why data behave as they do and developing prescriptions based on information behavior. Development of models of causality underlying data structures. Methods of communicating and implementing prescriptions for business action. **Current Description**: Prerequisite: ISQS 6339 and 6347. Covers advanced data mining and data analysis topics, including data preparation, predictive models, and predictive modeling with segmentation, etc. **Justification**: The department would like to update the course to better describe the topics that are taught. The new description will facilitate understanding of the degree program by potential students and employers. **Effective Term: Fall 2015** **CIP Code: 52.0201.0016**

43	ED	ADD	EDCI 6370	Research in STEM Education	3:3:0:0	LEC	Survey of research in science, mathematics, engineering, and/or technology education. **Justification**: This course has been taught twice as EDCI 5371, Curriculum and Instruction in Sciences and Math Education. The number, course title and description of this new course more accurately describe the course content that lays the foundation for doctoral research in STEM education. The creation of this new course frees EDCI 5371 to return to its original purpose of serving masters-level students. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
44	ED	ADD	EDCI 6371	Effective Policy Advocacy in STEM Education	3:3:0:0	LEC	A P1 conceptual development course that focuses on knowledge and understanding of effective advocacy avenues for STEM education issues and current progressive STEM education reform efforts at the local, regional, national, and international levels. **Justification**: This course has been taught as EDCI 6306, Advanced Seminar in Policy Advocacy in STEM Education. The number, course title and description of this new course more accurately describe the course which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
45	ED	ADD	EDCI 6372	Applied Assessment in STEM Education	3:3:0:0	LEC	A P1 exploration of current issues related to assessment, multiple dimensions of assessment, and the processes of assessment in mathematics and science education. **Justification**: This course has been taught twice as EDCI 5372, Assessment Issues in Science and Math Education. The number, course title and description of this new course more accurately describe the course content that lays the foundation for doctoral research in STEM education. The creation of this new course frees EDCI 5372 to return to its original purpose of serving masters-level students. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
46	ED	ADD	EDCI 6373	Advanced Theory of Inquiry in STEM Education	3:3:0:0	LEC	Introduces interdisciplinary pedagogies, technological tools, instructional strategies, and appropriate assessments for designing and developing inquiry-based instructional and learning environments in science and mathematics classrooms. **Justification**: This course has been taught as EDCI 5373, Designing Project-Enhanced Environments for Science and Mathematics. The number, course title and description of this new course more accurately describe the course which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. The creation of this new course frees EDCI 5373 to return to its original purpose of serving masters-level students. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
47	ED	ADD	EDCI 6374	International STEM Education Assessment, Policy and Practice	3:3:0:0	SEM	Prerequisites: EPSY 5381 and EDCI 6377 or consent of instructor. Analysis and policy implications of international assessments of STEM education. **Justification**: This course has been taught as EDCI 6306, Advanced Seminar in International STEM Education Assessment. The number,

							course title and description of this new course more accurately describe the course, which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
48	ED	ADD	EDCI 6375	Staff Development in STEM Education	3:3:0:0	LEC	Prerequisite: EDCI 6378 or consent of instructor. Principles of organizational change applied to STEM education. **Justification**: This course has been taught as EDCI 6306, Advanced Seminar in Staff Development in STEM Education. The number, course title and description of this new course more accurately describe the course which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
49	ED	ADD	EDCI 6377	Global STEM Education	3:3:0:0	LEC	Examines instructional methods to engage students in global STEM education. **Justification**: This course has been taught as EDCI 5377, Technology in Science/Math Education. The number, course title and description of this new course more accurately describe the course which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. The creation of this new course frees EDCI 5377 to return to its original purpose of serving masters-level students. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
50	ED	ADD	EDCI 6378	Applications of Global Science Education	3:3:0:0	PRC	Prerequisite: EDCI 6377 or consent of instructor. A supervised practicum in global STEM education. **Justification**: This course has been taught as EDCI 6393, Advanced Practicum in Curriculum and Instruction. The number, course title and description of this new course more accurately describe the course which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
51	ED	ADD	EDCI 6379	Applied Research in STEM Education	3:3:0:0	LEC	A P2 course that asks students to know, understand, evaluate, and apply through guided instructional framework the foundations and applications of qualitative and quantitative STEM education research methods. **Justification**: This course has been taught as EDCI 6306, Advanced Seminar in Curriculum and Instruction. The number, course title and description of this new course more accurately describe the course content which is an integral part of achieving the trademark outcomes of the Ph.D. in Curriculum and Instruction with specialization in STEM education. **Effective Term: Summer 2015** **CIP Code: 13.1399.0102**
52	ED	ADD	EPSY 6307	Case Study Research in Education	3:3:0:0	SEM	Study in design methods, issues and applications of case study research in education. **Justification**: The EPSY curriculum is divided into three interrelated phases. Each phase is designed to assist students in developing the knowledge and skills that research service providers posses. EPSY

							6307 is a Phase 2 course. Phase 2 courses are designed to help the student design or implement a research study in a controlled setting. The purpose of this course is to examine the design, issues, and application of case studies in educational settings. Students will use readings, discussions, and activities designed to provide them with the skills necessary to engage in case study research on their own. By the end of this phase, students will be able to (1) design a research plan that uses qualitative research methods that is clear, concise, and easily understood by the readers for whom the document is intended (e.g., practitioners, researchers, etc.), (2) analyze quantitative data for case study designs using appropriate analytical procedures, and (3) report research findings in written and presentation formats. An examination of the Texas Tech curriculum does not show any comparable courses listed in other areas of the university. Similar courses are offered at prospective peer (Association on American University) institutions as part of research curricula. **Effective Term: Summer 2015** **CIP Code: 13.0603.0004**
53	EN	ADD	ME 5348	Biomaterials	3:3:0:0	LEC	Prerequisite: Materials Science. Develops an understanding of structure and manufacturing-dependent properties for both synthetic and natural biomaterials used in biomedical engineering. **Justification**: This course will be part of the mechanical engineering graduate program designed to give students an interdisciplinary understanding and knowledge about the design, manufacturing, and characterization of biomaterials- and nanomaterials-based biomedical platforms. A complete treatment of the subject includes biomaterials physics/chemistry, design/manufacturing of biosensors/devices, synthesis of nanomaterials-based drug/gene delivers, and manufacturing of high-performance artificial tissues. This class is important to the ME program because it advances the program with the up-to-date knowledge on biomaterials and enables students to effectively pursue their graduate research related to biomechanics and biomedical engineering. **Effective Term: Spring 2016** **CIP Code: 14.0501.0006**
54	EN	ADD	ME 5349	Mechanics and Processing of Nanomaterials	3:3:0:0	LEC	The testing and evaluation of mechanical properties for nanostructured materials are considered in relationship to their synthesis and processing. **Justification**: The synthesis and processing of nanostructured materials affects their mechanical properties, hence, engineering applications. The course presents fundamental concepts for strengthening materials and methods of synthesis and processing to alter structure and applies these principles to the development of advanced nanostructures used in the form of protective coatings, membranes, and bulk structures. Considered are examples of nanostructured materials, including metals and alloys, ceramics, and polymer composites. The graduate course has been taught in Fall 2007, 2009 and Spring 2011 and 2014 semesters. A unique 300-plus page workbook containing lecture materials, homework problems, etc. has been prepared for this course since no textbooks on this specifically well-integrated topic are currently available. Over the four semesters the course has been taught, approximately 200 students have enrolled. **Effective Term: Summer 2015** **CIP Code: 14.1801.0006**

55	EN	ADD	ME 5361	Engineering Biomechanics	3:3:0:0	LEC	Develops quantitative understanding of biophysical processes in biological and human physiological systems. Applies engineering concepts to such systems. **Justification**: In this course the students will (1) learn the concepts of human motion, orthopedic biomechanics, and (2) enhance their skills in bioengineering by analyzing the mechanical behavior of various complex biomedical problems. Upon completion of this course, students will be able to (1) understand basic concepts in biomechanics, (2) apply engineering concepts to solve biomechanical problems, (3) perform basic uncertainty quantification and state assumptions, and (4) apply engineering design process in design of devices, fixtures, implants, and prostheses. This class is important to the program because current design courses do not include biological and human physiological systems. This course will be an addition to the group of design course and there will not be a need to delete any course from the design group. Furthermore there has recently been a lot of interest in engineering in medicine. **Effective Term: Fall 2015** **CIP Code: 14.0501.0006**
56	HS	ADD	NS 6310	Nutrition Education	3:3:0:0	LEC	Nutrition education and resources for diverse population across the lifespan. **Justification**: This course has been taught once as an independent study and was very successful. As the graduate program continues to grow, the department needs to offer a more diverse group of courses. This course is designed to aid the student with proper nutrition education techniques for all stages through the life cycle. **Effective Term: Summer 2015** **CIP Code: 19.0501.0007**
57	HS	ADD	NS 6335	Motivating Health Behavior—Coaching Theory and Application	3:3:0:0	LEC	The study of behavioral and psychological theory for assisting and motivating clients and the application of these theories in the context of health coaching with various patients. **Justification**: This course has been taught once as an independent study and was very successful. With the growth of the nutritional sciences program, the department needs to offer a more diverse group of courses. This course emphasizes the contributions to health and barriers to achieving positive health goals and applying basic health coaching and counseling skills. The content of the course has wide application across a number of career paths. **Effective Term: Summer 2015** **CIP Code: 42.2813.0001**
58	HS	ADD	RHIM 5309	Leadership Practices in Hospitality Organizations	3:3:0:0	LEC	A review of hospitality leadership practices, strategies, and philosophies to motivate and inspire individual employees and teams. **Justification**: With ever-changing hospitality and business environs, it is imperative that best practices be reinforced for student development and to improve success in the workplace upon graduation. This course will be a foundational course in the proposed 150-hour B.S.-M.S. in Hospitality and Retail Management as well as an elective for M.S. and Ph.D. students. **Effective Term: Fall 2015** **CIP Code: 52.0904.0016**
59	HS	CHG number, title, description	RHIM 6100 to RHIM 6101	**Proposed**: Doctoral Seminar I: Introduction to the Hospitality Administration Doctoral Program	1:1:0:0		An introduction to the many facets of life as a doctoral student in hospitality administration. Responsibilities, expectations, teaching, research, service and other relevant topics will be discussed. **Justification**: New title and number will clarify the content and

				Current: Seminar			sequencing of courses. **Effective Term: Fall 2015** **CIP Code: 52.0904.0016**
60	HS	ADD	RHIM 6102	Doctoral Seminar II: Academic Publishing in Hospitality Business Management	1:1:0:0	LEC	An introduction to publishing academic work in journals related to the hospitality, tourism and related business fields. **Justification**: It is critical that students learn to publish in the areas in which they intend to conduct research and teach during their academic career. This course addresses the area of academic publication, submission of manuscripts and processes for publishing in hospitality, tourism, and business-related journals. Topics, techniques, and the conceptual environment are all based on business-related principles. **Effective Term: Fall 2015** **CIP Code: 52.0904.0016**
61	HS	ADD	RHIM 6103	Doctoral Seminar III: Faculty Expectations in Hospitality Business Academic Settings	1:1:0:0	SEM	An introduction to the many facets of faculty life and the role faculty are expected to play in business-related higher education environments. **Justification**: Students seeking higher education positions in hospitality business programs need to understand faculty expectations and how they will address these expectations as they integrate knowledge and practice in business-related fields. **Effective Term: Fall 2015** **CIP Code: 52.0904.0016**
62	VP	ADD	VPA 5301	Colloquium: Inter/Disciplinarity in the Arts	3:3:0:0	LEC	Foundation for practice of interdisciplinary scholarship in the arts, including formation of interdisciplines, disciplinary labor of various approaches to arts research, and function of critical theory. **Justification**: This course is one of three revised interdisciplinary offerings for the core program in the college's one-of-a-kind Ph.D. program in fine arts. Revised courses will displace existing multidisciplinary offerings to establish a more integrated interdisciplinary structure for student's research in the arts. The core offerings impact all three specialization areas of art, music, and theatre, so alterations have been devised in conversations with the College's Graduate Committee and its entire administrative team. **Effective Term: Fall 2015** **CIP Code: 50.0101.0003**

New Program Request Form for Bachelor and Master's Degrees

Directions: An institution shall use this form to propose a new bachelor's or master's degree program. In completing the form, the institution should refer to the document *Standards for Bachelor's and Master's Programs*, which prescribes specific requirements for new degree programs. Note: This form requires signatures of (1) the Chief Executive Officer, certifying adequacy of funding for the new program; (2) a member of the Board of Regents (or designee) certifying that criteria have been met for staff-level approval. Note: An institution that does not have preliminary authority for the proposed program shall submit a separate request for preliminary authority. That request shall address criteria set forth in Coordinating Board Rules Section 5.24(a).

Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Administrative Information

1. Institution:
   Texas Tech University

2. Programs:
   Master's of Science in Chemical Biology

3. Proposed CIP Code:
   26.0210

4. Brief Program Description:
   The Chemical Biology Masters of Science Program builds on strong research at Texas Tech University in bioorganic, natural products, analytical, protein and enzyme chemistry to provide multidisciplinary training through a common course of study. The MS degree in Chemical Biology is designed principally for students who are interested in a formal program of study to understand the molecular concepts and approaches focused on small molecules as tools to dissect protein functions and interactions involved in biological processes.

   This program, which will be the first in the State of Texas, will give students the understanding, knowledge and skills they need to compete for jobs and positions requiring expertise and competency in translational medicine or agriculture. Special features of the CB training program include monthly student forums where students discuss ongoing research and internships, CB-sponsored symposia, seminars and workshops and laboratory rotations. The MS degree will offer both non-thesis and thesis options with the possibility of Teaching or Research Assistantships with member faculty.

5. Administrative
   This program has been approved by the Chemistry and Biochemistry faculty and Chair, Dr. Joachim Weber. It will be administered by the Department of Chemistry and Biochemistry and the Center for Chemical Biology within the College of Arts and Sciences.

6. Proposed Implementation Date:
   Fall Semester, 2015.

7. Contact Person
Name: W. David Nes, Ph. D.
Title: Paul W. Horn Professor and Director
E-mail: wdavid.nes@ttu.edu
Phone: (806)-742-1673

Program Information

I. Need

A. Job Market Need:

Technical careers that utilize molecular research tools directed at generating value-added agrochemicals, developing new drugs or providing an increased understanding of disease mechanisms are growing in the US and abroad. Employment of chemical biologists is expected to grow faster than the average for all occupations through the year 2020, because of the increasing demand for plant- and chemical-based pharmaceutical compounds. There are urgent needs in the elderly population and third-world countries ravaged by disease. A report on page 32 of the July 8, 2013 issue of *Chemical and Engineering News*, describes the results of the Career Development Conference at the Chemistry-Biology Interface held at the University of Illinois. This symposium laid out a myriad of options for Chemical Biology students. The CB program will prepare students to use a wide range of approaches and techniques to solve problems typically tackled by pharmaceutical and biotechnology companies. With the new developments arising from this emerging field, the need for chemical biologists is expected to increase with time.

There is great interest in graduate programs in this field at some of the finest universities in the US. The University of Michigan may have instituted the first Ph.D. program in this area (http://www.chembio.umich.edu/about/). Many other institutions have similar programs including MIT, Harvard, Cornell, Rockefeller University, the University of California at Berkley, the University of California at San Francisco, Yale, Indiana University (Chemistry Department), UT Southwestern and Vanderbilt University. There are a number of literature references attesting to the interest in and importance of Chemical Biology (e.g., *Nature Chemical Biology* **1**, 175 (2005); *Chemistry and Biology* **13**, 685, (2006); *Chemistry and Biology* **6**, R209 (1999)). The 69th Southwest Regional Meeting of the American Chemical Society held November 16-19, 2013 in Waco, TX entitled "Chemical Biology in Texas". The program includes colleagues from Texas A&M University, Baylor College of Medicine, University of Texas at Austin and Rice University. Chemical Biology is a modern concept with a translational emphasis in areas such as drug discovery and agriculture.

Insofar as we are able to determine, there is no Masters program of this type in the country.

B. Student Demand:

Students are increasingly attracted to the newest areas of research that represent opportunities to save and improve people's lives around the world. Continued interest by students in science degrees is noted in biosciences PhD production that has gone from about 3,000 per year in 1970 to 15,000 per year in 2012 and the need for doctors has increased exponentially in the same time frame. Chemical Biology is a modern discipline that attracts students interested in translation research such as drug discovery and development. Indeed, the NIH is now increasing funding for such translational programs, so there exist a strong match between students' interests and the

availability of research resources for Chemical Biology research. Employment possibilities for career-minded chemical biologists range from pharmaceutical technicians to laboratory chemists in government laboratories to genetic engineers in academia to supervising fungicide development programs in global industries. For comparison with our projections of 25-35 students awarded a MS degree in Chemical Biology in years 4-5 of the program, the average number of MS degrees in Chemistry at Texas Tech University over the last 10 years are 7-9 degrees per year with 4 awarded in 2013.

C. Enrollment Projections:

YEAR	1	2	3	4	5
Headcount	5	10	15	25	35
FTSE	2.5	5	7.5	10	12.5

II. Quality

A. Degree Requirements:

MS in Chemical Biology - Thesis Option

Category	Semester Credit Hours	Clock Hours
Graduate Course Work		
Required Courses	15	
Prescribed Electives	9	
Free Electives		
Other (Thesis)	6	
TOTAL	30	

MS in Chemical Biology - Non-Thesis Option

Category	Semester Credit Hours	Clock Hours
Graduate Course Work		
Required Courses	15	
Prescribed Electives	15	
Free Electives		
Other *(Specify, e.g., internships, clinical work)*	(If not included above)	
TOTAL	30	

B. Curriculum:

MS in Chemical Biology - Thesis option

Prefix and Number	Required Courses	SCH
CHEM 5337	Topics in Chemistry- Biochemistry of Natural Products [Nes/Trippier]	3
PHIL 5125	Introduction to Research Ethics	1
CHEM 5101/5102	Seminar in Chemical Biology [Nes]	2
CHEM 5304	Topics in Chemistry-Chemical Biology [D'Auria]	3
CHEM 7000	Research	6

Prefix and Number	Prescribed Elective Courses	SCH
CHEM 5309	Nucleic Acids [Shi]	3
BIOL 6304	Advanced Plant Molecular Biology [Zhang]	3
CHEM 5337	Enzymes [Shaw]	3
CHEM 5340	Principles of Physical Chemistry I (thermodynamics) [Poirier]	3
GCH 5350	Isotope Geochemistry [Horita]	3
CHEM 5333	Proteins [Weber]	3
CHEM 5330	Biochemistry I – amino acids and proteins [Shaw]	3
CHEM 5331	Biochemistry II – intermediate metabolism [Nes/Weber]	3
CHEM 5335	Physical Biochemistry [Shaw]	3

(Not all of these electives need to be taken)

Prefix and Number	Other (Thesis)	SCH
CHEM 6000	Master's Thesis	6

MS in Chemical Biology - Non-Thesis Option

Prefix and Number	Required Courses	SCH
CHEM 5337	Enzymes [Shaw]	3
CHEM 5333	Proteins [Weber]	3
CHEM 5304	Topics in Chemistry: Chemical Biology [D'Auria]	3
CHEM 5304	Topics in Chemistry- Biochemistry of Natural Products [Nes/Trippier]	3
PHIL 5125	Introduction to Research Ethics	1
CHEM 5101/5102	Seminar in Chemical Biology [Nes]	2
Prefix and Number	**Prescribed Elective Courses**	**SCH**
CHEM 5340	Principles in Physical Chemistry I [Poirier]	3
BIOL 6304	Advanced Plant Molecular Biology [Zhang]	3
GCH 5350	Isotope Geochemistry [Horita]	3
CHEM 5336	Lipids [Nes]	3
CHEM 5330	Biochemistry I [Shaw]	3
CHEM 5331	Biochemistry II [Weber/Nes]	3
CHEM 5339	Nucleic Acids [Shi]	3
CHEM 5335	Physical Biochemistry [Shaw]	3

We are purposefully employing our topics courses so as to provide the maximum flexibility in our graduate course offering. We have already added one new faculty member (Dr. D'Auria) and as we add other faculty, this flexibility will continue to be useful.

In some sense, the term Chemical Biology can be a bit of a misnomer for some. Like Biochemistry, Chemical Biology is a study of the ***chemistry*** of interesting and important biological systems. Indeed, the term Chemical Biology is used to emphasize the chemistry component.

C. Faculty

Name of Core Faculty and Faculty Rank	Highest Degree and Awarding Institution	Courses Assigned In Program	% Time Assigned To Program
Nes, W. David Horn Professor	Ph. D., University of Maryland	CHEM 5304 CHEM 5101/5331	35
Shaw, Robert Associate Professor	Ph. D., Pennsylvania State University	CHEM 5337 CHEM 5335/5330	25
Weber, Joachim Associate Professor	Ph. D., University of Lubeck (Germany)	CHEM 5333 CHEM 5102	10
Shi, Huazhong Associate Professor	Ph. D., University of Wuhan(China)	CHEM 5339	5
John D'Auria Assistant Professor	Ph. D., University of Michigan	CHEM 5304 CHEM 5330	25
Juske Horita Professor	Ph.D, Tokyo Institute of Technology	GCH 5350	5
Hong Zhang Professor	Ph. D., Michigan State University	BIOL 6340	5
William Poirier Professor	Ph. D., UC Berkeley	CHEM 5304	5
Paul Trippier Assistant professor	Ph. D, Oxford University (UK)	CHEM 5304	5

All faculty have agreed to mentor/advise graduate students in the proposed program.

D. Library:

The TTU libraries have nearly 200 research journals in the areas of chemical biology and biochemistry.

E. Facilities and Equipment:

Research equipment for general chemical biology research, including autoclaves, cold rooms microbiological culture rooms and ultracentrifuges are already available. Faculty set up funds will assist new faculty.

F. Accreditation:

Accreditation not available.

III. Costs and Funding

Five-Year Costs and Funding Sources - Use this table to show five-year costs and sources of funding for the program.

See attached sheet.

1. Report costs for new faculty hires, graduate assistants, and technical support personnel. For new faculty, prorate individual salaries as a percentage of the time assigned to the program. If existing faculty will contribute to program, include costs necessary to maintain existing programs (e.g., cost of adjunct to cover courses previously taught by faculty who would teach in new program).
2. Specify other costs here (e.g., administrative costs, travel).
3. Indicate formula funding for students new to the institution because of the program; formula funding should be included only for years three through five of the program and should reflect enrollment projections for years three through five.
4. Report other sources of funding here. In-hand grants, "likely" future grants, and designated tuition and fees can be included.

Signature Page

1. Adequacy of Funding – The chief executive officer shall sign and certify the following statement:

I certify that the institution has adequate funds to cover the costs of the new program. Furthermore, the new program will not reduce the effectiveness or quality of existing programs at the institution.

_____

Chief Executive Officer Date

2. Board of Regents Certification of Criteria for Commissioner or Assistant Commissioner Approval – A member of the Board of Regents or designee shall sign and certify that the new program meets the eight criteria under TAC Section 5.50(b). Once certified, the program may be approved by the Commissioner or the Assistant Commissioner for Academic Affairs and Research. The criteria stipulate that the program shall:

(1) be within the institution's current Table of Programs previously approved by the Board;
(2) have a curriculum, faculty, resources, support services, and other components of a degree program that are comparable to those of high quality programs in the same or similar disciplines at other institutions;
(3) have sufficient clinical or in-service sites, if applicable, to support the program;
(4) be consistent with the standards of the Commission on Colleges of the Southern Association of Colleges and Schools and, if applicable, with the standards or discipline-specific accrediting agencies and licensing agencies;
(5) attract students on a long-term basis and produce graduates who would have opportunities for employment; or the program is appropriate for the development of a well-rounded array of basic baccalaureate degree programs at the institution where the principal faculty and other resources are already in place to support other approved programs and/or the general core curriculum requirements for all undergraduate students;
(6) not unnecessarily duplicate existing programs at other institutions;
(7) not be dependent on future Special Item funding
(8) have new five-year costs that would not exceed $2 million.

On behalf of the Board of Regents, I certify that the new program meets the criteria specified under TAC Section 5.50(b).

_____

Board of Regents (Designee) Date

COSTS TO THE INSTITUTION OF THE PROGRAM/ADMINISTRATIVE CHANGE

Note: Use this chart to indicate the dollar costs to the institution that are anticipated from the change requested.

Cost Category	Cost Sub-Category	Before Approval Year*	1st Year	2nd Year	3rd Year	4th Year	5th Year	TOTALS
Faculty Salaries	(New)	$ -	$ -					
	(Reallocated)	$ -	$ -					
Faculty Fringe Benefits	(New)	$ -	$ -					
	(Reallocated)	$ -	$ -					
Program Administration	(New)	$ -	$ 14,173.0	$ 14,173.00	$ 14,173.00	$ 14,173.00	$ 14,173.00	$ 70,865.0
	(Reassignments)	$ -	$ -					
Graduate Assistants	(New)	$ -	$ 21,000.0	$ 42,000.0	$ 63,000.0	$ 105,000.0	$ 147,000.0	$ 378,000.0
	(Reallocated)	$ -	$ -					
Clerical/Staff	(New)	$ -	$ 18,000.0	$ 18,000.0	$ 36,000.0	$ 36,000.0	$ 36,000.0	$ 144,000.0
	(Reallocated)	$ -	$ -					
Supplies & Materials		$ -	$ 4,000	$ 4,000	$ 8,000	$ 8,000	$ 12,000	$ 36,000
Library & IT Resources**		$ -	$ 1,200	$ 1,200	$ 1,500	$ 1,500	$ 2,500	$ 7,900
Equipment		$ -	$ -					
Facilities		$ -	$ -					
Other (identify)		$ -	$ -					
TOTALS		$ -	$ -					$ 636,765

* Include costs incurred for three years before the proposal is approved by the Board (e.g., new faculty, library resources, equipment, facilities remodeling etc.).

** IT = Instructional Technology

Explanations:

Other - Travel expenses.

ANTICIPATED FUNDING SOURCES FOR THE PROGRAM/ADMINISTRATIVE CHANGE

Note: Use this chart to indicate the dollar amounts anticipated from various sources.

Funding Category	1st Year	2nd Year	3rd Year	4th Year	5th Year	TOTALS
Formula Income	$ 19,000.0	$ 37,000.0	$ 55,000.0	$ 91,000.0	$ 130,000.0	$ 332,000.0
Other State Funding	$ -	$ -	$ -	$ -	$ -	$ -
Local Tuition Income	$ 5,000.0	$ 10,000.0	$ 15,000.0	$ 20,000.0	$ 25,000.0	$ 75,000.0
Fees	$ 20,000.0	$ 30,000.0	$ 40,000.0	$ 60,000.0	$ 80,000.0	$ 230,000.0
Reallocation of Existing Resources	$ -	$ -	$ -	$ -	$ -	
Federal Funding (in-hand only)	$ -	$ -	$ -	$ -	$ -	$ -
TOTALS	$ 44,000	$ 77,000	$ 110,000	$ 171,000	$ 235,000	$ 637,000

Rationale: Name Change for Department of Theatre & Dance to "School of Theatre & Dance"

(*Submitted by the TTU College of Visual & Performing Arts, with proposed implementation date of August 19, 2015*.)

Texas Tech University's College of Visual and Performing Arts is initiating the established process for changing the name of the Department of Theatre & Dance, one of three units within the College, from "Department" to "School". The corresponding administrative title would change from "Chair, Department of Theatre & Dance" to "Director, School of Theatre & Dance."

As a **School of Theatre and Dance**, the Department's designation would be parallel with those of the other two units in the College, the School of Art and the School of Music. Although there appear to be no consistent best practices in use of terminology, an informal survey reveals that a school is typically larger, offers a greater variety and quality of programs, and emphasizes professionally oriented as well as liberal arts degrees. Since the founding of the College in 2002, the Department of Theatre and Dance has grown in number and diversity of degree programs, faculty and staff. It continues to make significant strides in improving its facilities and equipment, and is currently searching for a high profile Dance Executive to lead that program. The Department is enjoying unprecedented levels of national recognition, and it is making a strong bid to have one of the highest ranked graduate programs in the nation. Recent departmental accomplishments and successes include:

- The program consistently wins awards from the American College Dance Association (ACDA) and the Kennedy Center American College Theater Festival (KCACTF), both national organizations that support excellence.
- The Kennedy Center has twice recognized the program's attention to and support of new plays.
- Four students in the last two years have won national awards through the Kennedy Center.
- In 2013, more students from TTU presented at the program's national scholarly conference, ATHE (Association for Theatre in Higher Education) than any other school in the nation.
- In January 2015, ours will be THE featured drama and dance related program on the National Actors Hall of Fame website.
- The department is home to three **Integrated Scholars**, an award recognizing faculty dedicated to lifelong learning and dynamic integration of their activities across teaching, research and service.

Between one-fourth and one-third of TTU's peer and aspirational peer institutions have a "School" of Theatre or Drama. These include one of our NRUF competitors, the University of Houston (School of Theatre and Dance in the College of Liberal Arts

and Social Sciences). Many peer institutions, such as Florida State University (School of Theatre in the College of Fine Arts) have schools. Several important aspirational peers, all members of the American Association of Universities, are highly recognized for their schools:

- University of Washington's School of Drama
- University of California, Los Angeles' School of Theater, Film and Television
- Carnegie Melon University's School of Drama
- Yale University's School of Drama

With the recent successful accreditation of the Dance program by the National Association of Schools of Dance (one of only six accredited in connection with a theatre program), the Department enjoys full accreditation for *all* its degree programs. **Moreover, Texas Tech University is now the only public university in Texas to have national accreditation in four arts areas:**

- **Art & Design** (National Association of Schools of Art & Design, NASAD),
- **Dance** (National Association of Schools of Dance, NASD),
- **Music** (National Association of Schools of Music, NASM), and
- **Theatre** (National Association of Schools of Theatre, NAST).

Although all three units in the College already enjoy equal stature in the eyes of the administrative team, the college leadership strongly supports and encourages a change that publically acknowledges equivalent stature of all four arts areas.

Change in Last Day to Withdraw Policy:

In the past, the standard for Last Day to Withdraw has been five (5) business (3 business days for summer session) days prior to the first day of finals. Because of federal financial aid requirements that student withdrawal cannot happen on a student holiday (no matter if staff are working), the Provost Office has approved a new standard.

The new standard will be five (5) class days prior to the first day of finals (3 class days in summer session).

This new standard will allow for fall withdrawal to happen during a student class day. In the past, the last day to withdraw in the fall has happened on the Wednesday of Thanksgiving break. That is a student holiday but staff work.

The following dates should be updated in the 2015-2016 catalog:

Fall 2015 Last day to withdraw: Tuesday, November 24, 2015
Spring 2016 Last day to withdraw: Wednesday, May 4, 2016
Summer I last day to withdraw: Tuesday, July 5th (same as current date on calendar)
Summer II last day to withdraw: Monday, August 8th (same as current date on calendar)