University Curriculum Committee
March 26, 2020 Meeting Minutes

The University Curriculum Committee met on **Thursday, March** at 3:00 p.m. via Zoom Meeting.

Members Present:

Melinda Anderson	Julie Baker	Jeff Boles	Brittany Copley
Bruce Greene	Julie Galloway	Jerry Gannod	Mike Gotcher
Rita Barnes	Brandi Hill	Sharon Huo	Brandon Johnson
Sharon Holderman	Allen Mackenzie	Lori Maxwell	Ben Mohr
Mohan Rao	Wendy Mullen	Janet Whiteaker	Martin Sheehan
Jeff Roberts	Stephen Robinson	Paul Semmes	Linda Null
Thomas Payne	Wesley Pech	Richard Rand	Dale Wilson
Barry Stein	Mark Stephens	Evan Hart	Thomas Timmerman
Lisa Zagumny	Darron Smith	Brenda Wilson	Kim Winkle
Allan Mills	Courtney Fowler, Student	Jeremy Wendt, Chair	Chris Brown
Chris Wilson	Edith Duvier	Steve Frye	Adam Grim
Kim Hanna	Steve Isbell	Christy Killman	

Members Absent:

Jennifer Shank	Lori Bruce	Hayden Mattingly	Joseph Slater
Alexis Harvey, Student	Emma Kenner, Student	Pedro Arce	Robert Hill, Student

Official Representative(s):

Tammy Boles FOR	Hayden Mattingly	Jessica Oswalt FOR	Jerry Gannod

Guest(s):

Cari Williams	Mary McCaskey	Martha Kosa	Ann Marie Carrick
Elizabeth Sofia			

Outline of Proceedings:

1.	Approval of Agenda	**9.**	Biology
2.	Approval of February 13, 2020 Minutes	**10.**	History
3.	Curriculum & Instruction	**11.**	Honors
4.	Counseling & Psychology	**12.**	Mathematics
5.	Exercise Science and Physical Wellness	**13.**	Art, Craft & Design
6.	Foreign Language	**14.**	Civil and Environmental Engineering
7.	Earth Sciences	**15.**	Computer Science
8.	Physics	**16.**	Electrical & Computer Engineering

17.	General & Basic Engineering	**23.**	Agriculture
18.	Chemical Engineering	**24.**	Human Ecology
19.	Business	**25.**	Interdisciplinary Studies
20.	Decision Sciences and Management	**26.**	Environmental Studies
21.	Economics, Finance and Marketing	**27.**	Chemistry
22.	Manufacturing and Engineering Technology		

Proceedings:

Perceiving a quorum, Dr. Jeremy Wendt, Chair of Committee, called the meeting to order at 3:01pm via Zoom.

**Due to the meeting being via Zoom, all motion and seconds will be initiated by Lisa Zagumny and Christy Killman throughout the meeting. Any objections can be called for discussion.*

1. **Approval of agenda**

   Motion to approve. Lisa Zagumny
   Second. Christy Killman
   Vote. Motion carried.

2. **Approval of minutes, February 13, 2020**
   Motion to approve. Lisa Zagumny
   Second. Christy Killman
   Vote. Motion carried.

3. **Curriculum & Instruction**
   A. **Course/Catalog Changes.**
   1) **From:**

   FOED 1820. Introductory Field Experience Lec. 1. Credit 1.
   Corequisite: FOED 2011. Observation and discussion of authentic educational settings appropriate for licensure area(s). For all licensure majors, not available for freshmen. A minimum grade of B is required to meet degree requirements.

   To:
   FOED 1820. Introductory Field Experience Lec. 1. Credit 1.
   Corequisite: FOED 2011. Observation and discussion of authentic educational settings appropriate for licensure area(s). For all licensure majors. A minimum grade of B is required to meet degree requirements.

   2) **From:**

   SPED 3031. Physical Management & Support for Orthopedic, Motor & Health Impaired Lec. 3. Credit 3.
   Introduction to medical and educational support services. Emphasizes handling, instructional modifications, and support services.

   To:
   SPED 3031. Physical Management & Support for Orthopedic, Motor & Health Impaired Lec. 3. Credit 3.
   Prerequisite: Full admission to the Teacher Education Program. Introduction to medical and educational support services. Emphasizes handling, instructional

modifications, and support services. A minimum grade of B is required to meet requirements for licensure candidates.

Add: Prerequisite: Full admission to the Teacher Education Program. And "A minimum grade of B is required to meet requirements for licensure candidates." to the course description.

3) From:

ECSP 4000. Developmentally Appropriate Practices: Birth-Preschool
Lec. 3. Lab. 3. Credit 3.
Prerequisite: Full admission to the Teacher Education Program. Integrated learning experiences with emphasis on approaches, teaching strategies, and management.

To:

ECSP 4000. Developmentally Appropriate Practices: Birth-Preschool
Lec. 3. Credit 3.
Prerequisite: Full admission to the Teacher Education Program. Corequisite: ECSP 4010. Integrated learning experiences with emphasis on approaches, teaching strategies, and management. A minimum grade of B is required to meet requirements for licensure candidates.

Delete: Lab. 3.
Add: Corequisite: ECSP 4010. A minimum grade of B is required to meet requirements for licensure candidates.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

B. Curriculum Changes.

1) Early Childhood Practitioner, B.S.

First Semester Freshman Year

From:

ART 1035. Introduction to Art (credit 3) OR
MUS 1030. Music Appreciation (credit 3)

BIOL 1080. Concepts of Biology (credit 3)

To:

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

Select One:
BIOL 1080. Concepts of Biology (credit 3) OR
CHEM 1310. Concepts of Chemistry (credit 3) OR
GEOL 1070. Concepts of Geology (credit 3) OR
PHYS 1310. Concepts of Physics (credit 3)

2) **Second Semester Freshman Year**
From:
GEOL 1070. Concepts of Geology (credit 3)

To:
Select One:
BIOL 1080. Concepts of Biology (credit 3) OR
CHEM 1310. Concepts of Chemistry (credit 3) OR
GEOL 1070. Concepts of Geology (credit 3) OR
PHYS 1310. Concepts of Physics (credit 3)

3) **First Semester Sophomore Year**
From:
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

GEOG 1012. Cultural Geography (credit 3)

SOC 1010. Introduction to Sociology (credit 3) OR
ANTH 1100. Introduction to Anthropology

CHEM 1310. Concepts of Chemistry (credit 3)

To:
ENGL2130. Topics in American Literature (credit 3) * OR
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

Social/Behavioral Sciences Elective (Gen Ed) (credit 6)

Select One:
BIOL 1080. Concepts of Biology (credit 3) OR
CHEM 1310. Concepts of Chemistry (credit 3) OR
GEOL 1070. Concepts of Geology (credit 3) OR
PHYS 1310. Concepts of Physics (credit 3)

***Note:** ENGL 2130 moved *here* from Second Semester Sophomore Year

4) **Second Semester Sophomore Year**

From:

CFS 2400. Children with Special Needs (credit 3)

ENGL2130. Topics in American Literature (credit 3) *

PHYS 1310. Concepts of Physics (credit 3)

To:

ECSP 2400. Children with Special Needs (credit 3)

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

Select One:
BIOL 1080. Concepts of Biology (credit 3) OR
CHEM 1310. Concepts of Chemistry (credit 3) OR
GEOL 1070. Concepts of Geology (credit 3) OR
PHYS 1310. Concepts of Physics (credit 3)

* **Note:** ENGL 2130 moved *to* First Semester Sophomore Year

5) **Multidisciplinary Studies, Middle School Math, 6-8 Concentration, B.S.**

1) **First Semester Sophomore Year**

From:

HEC 3500. Development: Middle Childhood/Adolescence (credit 3) *

To:

MATH 1720. Pre-calculus Trigonometry (credit 3)

***Note:** HEC 3500 moved *to* Second Semester Sophomore Year; MATH 1720 moved *here* from Second Semester Sophomore Year

2) **Second Semester Sophomore Year**

From:

EDPY 2210. Educational Psychology (credit 3)

MATH 1530. Introductory Statistics (credit 3) *

MATH 1720. Pre-calculus Trigonometry (credit 3) *

Semester Total Hours: **15**

*Note: MATH 1530 moved *to* First Semester Junior Year; MATH 1720 moved *to* First Semester Sophomore Year

To:
CSED 3010. Programming Fundamentals & Computational Thinking for Educators (credit 3)

HEC 3500. Development: Middle Childhood/Adolescence (credit 3) *

MATH 1910. Calculus I (credit 4) *

Semester Total Hours: **16**

***Note:** HEC 3500 moved *here* from First Semester Sophomore Year; MATH 1720 moved *to* First Semester Sophomore Year; MATH 1910 moved *here* from First Semester Junior Year

3) **First Semester Junior Year**
From:
MATH 1910. Calculus I (credit 4) *

Semester Total Hours: **16**

To:
MATH 1530. Introductory Statistics (credit 3) *

Semester Total Hours: **15**

*Note: MATH 1910 moved *to* Second Semester Sophomore Year; MATH 1530 moved *here* from Second Semester Sophomore Year

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

C. Addition of Minors.
For the minors listed below, students may earn a minor in any program outside of their major by taking 9 credit hours in a single area **plus** 6 credit hours in any other education prefixes* for a total of 15 credit hours. (e.g. 9 hours of CSED plus 6 hours SPED)

1. **Early Childhood Education** (ECED or ECSP)

2. **Elementary Education** (ELED)
3. **Foundations of Education** (FOED)
4. **Reading** (READ)
5. **Secondary Education** (SEED)
6. **Special Education** (SPED)
7. **Computer Science Education** (CSED)

(*CSED, CUED, ECED, ECSP, ELED, ESLP, ESOL, FOED, PSY, READ, SEED, SPED)

2. For the minor listed below, students may earn a minor outside their major by taking a total of 15 credit hours.

A. **Middle Grades**- 15 total credit hours
Minimum 3 credit hours in CUED

Minimum 3 credit hours in SEED

Minimum 3 credit hours in READ

6 credit hours in any of the following: SPED, PSY, FOED, ESLP or ESOL

B. **English as a Second Language** (ESLP)

Minimum 9 credit hours in ESLP or ESOL

Minimum 3 credit hours in CUED

Minimum 3 credit hours in FOED

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

D. Course/Catalog Changes.

1) Course Additions.

ESOL 4400. Foundations of Language for ESOL Educators Lec. 3. Credit 3. Explores students' language acquisition and language development. Focuses on introduction of the language as a broad system in order to help future ESL educators to successfully navigate through language acquisition theories and foundations of linguistics.

2) Course Changes.

From:

CUED 4150. Middle Level Curriculum Lec. 3. Credit 3.
Prerequisite: Full admission to the Teacher Education Program. Corequisite: For SEED majors only, FOED 3830. An examination of the philosophy, organization, and curriculum of middle level education, including career awareness and

exploration, interdisciplinary team teaching, principles of classroom management, and family involvement in the schools.

To:

CUED 4150. Middle Level Curriculum Lec. 3. Credit 3.
Prerequisite: Full admission to the Teacher Education Program. An examination of the philosophy, organization, and curriculum of middle level education, including career awareness and exploration, interdisciplinary team teaching, principles of classroom management, and family involvement in the schools. A minimum grade of B is required to meet degree requirements for licensure candidates.

Delete: Corequisite: For SEED majors only, FOED 3830
Add: A minimum grade of B is required to meet requirements for licensure candidates.

3) From:

READ 3350. Teaching Reading in the Content Areas Lec. 3. Credit 3.
Prerequisite: Full admission to the Teacher Education Program. Emphasis on skills needed for content area reading and selection of materials and appropriate techniques for diverse learners.

To:

READ 3350. Teaching Reading in the Content Areas Lec. 3. Credit 3.
Emphasis on skills needed for content area reading and selection of materials and appropriate techniques for diverse learners.

Delete: Prerequisite: Full admission to the Teacher Education Program.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

E. Curriculum Changes.

1) Secondary Education, English Concentration, B.S. ED.

A. Second Semester Freshman Year

From:

Elective (credit 1)

To:

ESLP 3100. ESL Pedagogy: SEED Methodology & Materials (credit 1)

B. First Semester Junior Year

From:
ESLP 4100(5100). ESL Methodology & Materials for PreK-12 (credit 3)

To:
CUED 4150. Middle Level Curriculum (credit 3)

2) Special Education, Comprehensive Program Concentration, B.S.

A. First Semester Sophomore Year

From:
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

To:
ENGL 2130. Topics in American Literature (credit 3) OR
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

B. Second Semester Sophomore Year

From:
ENGL 2130. Topics in American Literature (credit 3)

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

To:
Humanities/Fine Arts Elective (Gen Ed) (credit 6)

3) Special Education, SE Interventionist Biology, 6-12 Concentration, B.S.

A. First Semester Sophomore Year

From:
ENGL 2130. Topics in American Literature (credit 3)

To:
ENGL 2130. Topics in American Literature (credit 3) OR
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

B. Second Semester Sophomore Year

From:
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

To:

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

4) **Special Education, SE Interventionist English, 6-12 Concentration, B.S.**

A. **First Semester Freshman Year**

From:

Science Sequence (Gen Ed) (credit 4)

To:

Natural Sciences (Gen Ed) (credit 4)

B. **Second Semester Freshman Year**

From:

Science Sequence (Gen Ed) (credit 4)

To:

Natural Sciences (Gen Ed) (credit 4)

5) **Special Education, SE Interventionist History, 6-12 Concentration, B.S.**

A. **First Semester Freshman Year**

From:

Science Sequence (Gen Ed) (credit 4)

To:

Natural Sciences (Gen Ed) (credit 4)

B. **Second Semester Freshman Year**

From:

Science Sequence (Gen Ed) (credit 4)

To:

Natural Sciences (Gen Ed) (credit 4)

C. **First Semester Sophomore Year**

From:

ENGL 2235. Topics in British Literature (credit 3) OR

ENGL 2330. Topics in World Literature (credit 3)

To:

ENGL 2130. Topics in American Literature (credit 3) OR

ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

D. Second Semester Sophomore Year

From:

ENGL 2130. Topics in American Literature (credit 3)

To:

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

6) Special Education, SE Interventionist Math, 6-12 Concentration, B.S.

A. First Semester Freshman Year

From:

Science Sequence (Gen Ed) (credit 4)

To:

Natural Sciences (Gen Ed) (credit 4)

B.Second Semester Freshman Year

From:

Science Sequence (Gen Ed) (credit 4)

To:

Natural Sciences (Gen Ed) (credit 4)

C. First Semester Sophomore Year

From:

ENGL 2130. Topics in American Literature (credit 3)

ART 1035. Introduction to Art (credit 3) OR
MUS 1035. Music Appreciation (credit 3)

To:

ENGL 2130. Topics in American Literature (credit 3) OR
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

D. Second Semester Sophomore Year

From:

ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

To:

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

7) Special Education, SE Interventionist K-8 Concentration, B.S.

A. First Semester Sophomore Year

From:

ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

To:

ENGL 2130. Topics in American Literature (credit 3) OR
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

B. Second Semester Sophomore Year

From:

ENGL 2130. Topics in American Literature (credit 3)

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

To:

Humanities/Fine Arts Elective (Gen Ed) (credit 6)

8) Special Education Practitioner, B.S.

A. Sophomore Year

From:

ENGL 2130. Topics in American Literature (credit 3)

ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

Humanities/Fine Arts Elective (Gen Ed) (credit 3)

To:

ENGL 2130. Topics in American Literature (credit 3) OR
ENGL 2235. Topics in British Literature (credit 3) OR
ENGL 2330. Topics in World Literature (credit 3)

Humanities/Fine Arts Elective (Gen Ed) (credit 6)

B. Junior Year

From:

Electives (credit 9)

To:
Electives (credit 6)

FOED 3010. Integrating Instruc. Tech into the Classroom (credit 3)

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

4. <u>Counseling & Psychology</u>

A. Course Deletion.
EDPY 3300 Evaluation and Guidance
Effective Date: Fall 2020

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

B. Course Prefix Changes.
A. Curriculum Changes.
Change course prefixes from EDPY to PSY
Effective Date: Spring 2020

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

C. Course Changes.
From:
PSY 4050 Learning and Cognition
Lec. 3. Credit 3.
Prerequisite: PSY 2010. Theory, research and applications in human learning, and memory and cognitive processes.

To:
PSY 4050 Learning and Cognition

Lec. 3. Credit 3.
Prerequisite: PSY 2010 and a grade of C or higher in PSY 3010. Theory, research and applications in human learning, and memory and cognitive processes.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried.

5. <u>Exercise Science</u>

A. Minor Change.

1) Request changing the current requirements for the Minor in Coaching from 18 to 15 credit hours from the list of courses on record, and from 18 to 15 credit hours for the Minor in Exercise Science from the list of courses on record.

2) New Minor.
A new minor in Aquatics with the credit hour requirement of 15 total from this list of courses and at least 5 hours at 2000 level or above.

PHED 1020 – Swimming (1),
PHED 1021 – Intermediate Swimming (1),
PHED 1022 – Survival Swimming (1),
PHED 1160 – Scuba & Skin Diving (1),
PHED 1190 – Water Aerobics (1),
PHED 1220 – Active Lifestyles (1),
PHED 1280 – Kayaking (1),
PHED 1505 – Divemaster (2),
PHED 1540 – Rescue Diver (2),
PHED 1550 – Advanced Open Water Scuba Diving (2),
PHED 1650 – Outdoor Water Skills (1),
EXPW 1150 – Care & Prevention of Athletic Injuries (3),
EXPW 2100 – Lifeguard Training (certification), (2)
EXPW 2440 – Safety and Accident Prevention (2),
EXPW 3050 – Water Safety Instructor (2),
EXPW 4560 – Facility Planning and Management (3).

3) New Minor.
A new minor in Health and Wellness, students must complete 15 hours from the following list with at least 6 hours at the 3000 level or above.

EXPW 2015 – Concepts of Health and Wellness (3) OR
EXPW 2130 – Concepts of Comprehensive Health (3),
EXPW 2150 – Human Sexuality (3),
EXPW 2160 – Drug Use and Abuse (2),

EXPW 2430 – First Aid, Safety & CPR (2),
EXPW 2900 – Structural Anatomy (3),
EXPW 3070 – Lifetime Wellness and Leisure Activities (3),
EXPW 3500 – Physical Activity, Health and Special Populations (3),
EXPW 4032 – Exercise Prescription (3),
EXPW 4042 – Health Promotion (3),
EXPW 4290 – Accident Prevention (2),
HEC 1030 – Introduction to Nutrition (2) or
HEC 2020 – Nutrition for Health Sciences (3),
HEC 3290 – Nutrition Through the Lifecycle (3),
HEC 4940 – Nutrition, Fitness and Wellness (3),
NURS 3450 – Personal Wellness Management (3),
PHED 1005 – Lifetime Fitness & Wellness (2),

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

B. Catalog Change.

1) Field Experience Course

From:
EXPW 4810 – Field Experience Lab 1-4. Credit 1-4.

To:
EXPW 4810 – Field Experience Lab 2-8. Credit 1-4.

2) From:
EXPW 4820 – Field Experience Lab 1-4. Credit 1-4.

To:
EXPW 4820 – Field Experience Lab 2-8. Credit 1-4.

3) From:
EXPW 4830 – Field Experience Lab 1-4. Credit 1-4.

To:
EXPW 4830 – Field Experience Lab 2-8. Credit 1-4.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

C. Concentration/Undergraduate Change.

1) **Pre-Physician Assistant**

Additions.

a. EXPW 2430 – First Aid, Safety and CPR. Lec. 1. Lab. 2. Credit 2.
This course consists of practice and application of the most current standards and accepted principles of CPR, safety and first aid. Students have opportunity to obtain certification through the American Red Cross.

b. EXPW 2900 – Structural Anatomy. Lec. 3. Credit 3.
Muscles and bones primarily of the upper extremities, lower extremities, and spine including anatomical terminology, locations, planes, joints, and basic skeletal movement.

c. EXPW 3310 – Professional Preparation. Lec. 1. Credit 1.
This course is designed for every student to benefit from learning about the graduate school application process, preparing documents for graduate school applications as well as first time on the professional job market, learning to sell one's self to potential employers or others who are reviewing applications and/or interviewing. Cover letters, follow-up procedures, professional philosophy and writing a winning resume are topics to be covered.

d. Add to Directed Elective Options:
CHEM 4610 – General Biochemistry I

Deletions.

a. EXPW 4171 – Exercise and Sport Psychology. Lec. 3. Credit 3.
Prerequisite: Junior or Senior Standing in EXPW and PSY 1030 or permission of instructor.

Changes.

a. **From:**
HEC 1030 – Introduction to Nutrition. Lec. 2. Credit 2.

To:
HEC 1030 – Introduction to Nutrition. Lec. 2. Credit 2. OR
HEC 2020 – Nutrition for Health Sciences. Lec. 3. Credit 3.

b. **From:**
COMM 2025 – Fundamentals of Communication. Lec. 3. Credit 3.

To:
COMM 2025 – Fundamentals of Communication. Lec. 3. Credit 3. OR
PC 2500 – Communicating in the Professions Lec. 3. Credit 3.

c. **From:**
EXPW 4810 – Field Experience. Lab 1-4. Credit 1-4.

To:
EXPW 4820 – Field Experience. Lab 2-8. Credit 1-4.

d. **From:**
Elective Credit 5.

To:
Elective Credit 1.

e. **From:**
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

To:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

f. **From:**
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

To:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

2) <u>Pre-Physical Therapy</u>

Additions.

a. EXPW 1130 – Introduction to Physical Therapy. Lec. 1. Credit 1.

b. EXPW 3310 – Professional Preparation. Lec. 1. Credit 1.

c. EXPW 2900 – Structural Anatomy. Lec. 3. Credit 3.
Muscles and bones primarily of the upper extremities, lower extremities, and spine including anatomical terminology, locations, planes, joints, and basic skeletal movement.

d. EXPW 3550 – Support and Services for Persons with Physical Impairments. Lec. 3. Credit 3.
Survey of variety of assistive technology and devices, and educational and health related resources for persons with physical impairments. A variety of conditions and modifications will be explored.

e. EXPW 4760 – Functional Movement. Lec. 3. Credit 3. OR EXPW 4032 – Training for Performance. Lec. 3. Credit 3.

f. ADD to Directed Elective Options:
EXPW 3410 – Lifespan Motor Development
EXPW 2200 – Leadership Development

Deletions.

a. EXPW 4210 – Gerontology. Lec. 3. Credit 3.
b. EXPW 3410 – Lifespan Motor Development. Lec. 3. Credit 3.
c. SPED 3031 – Physical Management and Support Services for Orthopedic, Motor and Health Impaired. Lec. 3. Credit 3.
d. DS 2810 – Computer Applications in Business. Lec. 3. Credit 3.

Changes.

a. From:
EXPW 4810 – Field Experience. Lab 1-4. Credit 1-4.

To:
EXPW 4820 – Field Experience. Lab 2-8. Credit 1-4.

b. From:
HEC 1030 – Introduction to Nutrition. Lec. 2. Credit 2.

To:
HEC 1030 – Introduction to Nutrition. Lec. 2. Credit 2. OR
HEC 2020 – Nutrition for Health Sciences. Lec. 3. Credit 3.

c. From:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.

Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

To:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

d. From:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

To:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

D. Concentration/Undergraduate Change.

1) <u>Fitness and Wellness</u>

Additions.

a. EXPW 2900 – Structural Anatomy. Lec. 3. Credit 3.
Muscles and bones primarily of the upper extremities, lower extremities, and spine including anatomical terminology, locations, planes, joints, and basic skeletal movement.

Changes.

a. From:
Elective credit 10.

To:
Elective credit 7.

b. From:
EXPW 4810 – Field Experience Lab 1-4. Credit 1-4.

To:
EXPW 4810 – Field Experience Lab 2-8. Credit 2-8.

c. From:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

To:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

d. From:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

To:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

2) <u>Sports Administration</u>

Additions.

a. EXPW 3310 – Professional Preparation. Lec. 1. Credit 1.

Deletions.

a. DS 2810 – Computer Applications in Business. Lec. 3. Credit 3. Management approach to business applications for computer technology.

b. EXPW 3000 - Professional Development and Career Planning. Lec. 1. Credit

Changes.

a. **From:**
Elective credit 3.

To:
Elective credit 6.

b. **From:**
EXPW 4810 – Field Experience Lab 1-4. Credit 1-4.

To:
EXPW 4810 – Field Experience Lab 2-8. Credit 2-8.
Justification: Clean up error in catalog related to time spent and credit hours awarded.

c. **From:**
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

To:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

d. **From:**
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

To:

EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.

Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

3) Physical Education Teacher Licensure

Additions.

a. EXPW 2900 – Structural Anatomy. Lec. 3. Credit 3.

Muscles and bones primarily of the upper extremities, lower extremities, and spine including anatomical terminology, locations, planes, joints, and basic skeletal movement.

b. EXPW 3310 – Professional Preparation. Lec. 1. Credit 1.

Deletions.

a. EXPW 2130 – Concepts of Comprehensive Health. Lec. 3. Credit 3.

b. EXPW 3000 – Professional Development and Career Planning. Lec. 1. Credit 1.

Changes.

a. From:
EXPW 2150 – Human Sexuality. Lec. 3. Credit 3.

To:
EXPW 2150 – Human Sexuality. Lec. 3. Credit 3. OR
EXPW 2200 – Leadership Development in Exercise Science and Sport. Lec. 3. Credit 3.

b. From:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

To:
EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular

systems, and basic biomechanics and applications related to training and performance of athletes.

c. **From:**
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

To:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

d. **From:**
EXPW 4712 – Methods of Teaching Secondary Physical Education. Lec. 3. Credit 3.
Prerequisite: Physical education licensure major; full admission into the teacher education program; completion of EXPW 3720, EXPW 3565 with grade of "B" or better. Corequisite: EXPW 4750.

To:
EXPW 4712 – Methods of Teaching Secondary Physical Education. Lec. 3. Credit 3.
Prerequisite: Physical education licensure major; full admission into the teacher education program; completion of EXPW 3720, EXPW 3565 with grade of "B" or better. Corequisite: EXPW ~~4750~~. 4751.

E. Catalog and Concentration Changes.

1. <u>Pre-Athletic Training</u>

Additions.

1. EXPW 2900 – Structural Anatomy. Lec. 3. Credit 3.

   Muscles and bones primarily of the upper extremities, lower extremities, and spine including anatomical terminology, locations, planes, joints, and basic skeletal movement.

2. EXPW 2200 – Leadership Development in Exercise and Sport. Lec. 3. Credit 3.

This course combines leadership theory with practical application, equipping students with the knowledge and skills needed for leadership in sports, teaching and exercise science related fields/professions. Leadership is explored as an integral component of a student's career and life plan, focusing on the value of developing a philosophy for self-leadership that will help them move toward influencing others.

3. EXPW 3310 – Professional Preparation. Lec. 1. Credit 1.

   This course is designed for every student to benefit from learning about the graduate school application process, preparing documents for graduate school applications as well as first time on professional job market, learning to sell one's self to potential employers or others who are reviewing applications and/or interviewing. Cover letters, follow-up procedures, professional philosophy and writing a winning resume are topics to be covered.

4. Add as directed elective options:

   CHEM 1110 – General Chemistry I,
   PHYS 2010 – Algebra Based Physics I,
   EXPW 4032 – Training for Performance,
   EXPW 4042 – Health Promotion

Deletions.

1. **From:**
   BIOL 1010 – Introduction to Biology

   To:
   BIOL 1010 – Introduction to Biology OR BIOL 1113 – General Biology I

2. **From:**
   BIOL 1020 – Diversity of Life

   To:
   BIOL 1020 – Diversity of Life OR BIOL 1123 – General Biology II

3. **From:**
   EXPW 2001 – Orthopedic Assessment I. Lec. 3. Clinical 1. Credit 4. Prerequisite: Sophomore Standing. Corequisite: BIOL 2010. This course……

   To:
   EXPW 2001 – Orthopedic Assessment I. Lec. 3. Clinical 1. Credit 4.

Prerequisite: Sophomore standing, EXPW 2900 with grade of C or better. ~~Corequisite: BIOL 2010.~~ This course……

4. **From:**
   EXPW 3001 – Therapeutic Rehabilitation and Modalities. Lec. 3. Credit 3.
   Prerequisite: EXPW 2001 and EXPW 2002. Corequisite: EXPW 3011. This course…

   To:
   EXPW 3001 – Therapeutic Rehabilitation and Modalities. Lec. 3. Credit 3.
   Prerequisite: EXPW 2001 and EXPW 2002. ~~Corequisite: EXPW 3011.~~ This course….

5. **From:**
   EXPW 3011 – Clinical I. Clinical 3. Credit 3.
   Corequisite: EXPW 3001. This clinical……

   To:
   EXPW 3011 – Clinical I. Clinical 3. Credit 3.
   ~~Corequisite: EXPW 3001.~~ This clinical…..

6. **From:**
   Elective Hours - total 7

   To:
   Elective Hours - total 2

7. **From:**
   EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
   Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

   To:
   EXPW 4420 – Kinesiology. Lec. 3. Credit 3.
   Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

8. **From:**
   EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.

Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

To:
EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.
Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

2. <u>Pre-Occupational Therapy</u>

Additions.

1. EXPW 2900 – Structural Anatomy. Lec. 3. Credit 3.

   Muscles and bones primarily of the upper extremities, lower extremities, and spine including anatomical terminology, locations, planes, joints, and basic skeletal movement.

2. EXPW 3550 – Support and Services for Persons with Physical Impairments. Lec. 3. Credit 3.

   Survey of variety of assistive technology and devices, and educational and health related resources for persons with physical impairments. A variety of conditions and modifications will be explored.

3. Add to the list of Directed Electives options:

   EXPW 3410 – Lifespan Motor Development
   EXPW 2200 – Leadership Development in Exercise and Sport
   EXPW 4560 – Functional Movement

Deletions.

1. EXPW 3410 – Lifespan Motor Development. Lec. 3. Credit 3.

2. SPED 3031 – Physical Management and Support Services for Orthopedic, Motor and Health Impaired. Lec. 3. Credit 3.

3. **From:**
   HEC 1030 – Introduction to Nutrition. Lec. 2. Credit 2.

   To:
   HEC 1030 – Introduction to Nutrition. Lec. 2. Credit 2. OR
   HEC 2020 – Nutrition for Health Sciences. Lec. 3. Credit 3.

4. **From:**
   EXPW 4810 – Field Experience. Lab. 1-4. Credit 1-4.

   To:
   EXPW 4820 – Field Experience. Lab. 2-8. Credit 1-4.

5. **From:**
   EXPW 4420 – Kinesiology. Lec. 3. Credit 3.

   Prerequisite: BIOL 2010 or BIOL 2350. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

   To:
   EXPW 4420 – Kinesiology. Lec. 3. Credit 3.

   Prerequisite: BIOL 2010 or BIOL 2350 and EXPW 2900. This course is the advanced study of the anatomy of the muscular, skeletal and articular systems, and basic biomechanics and applications related to training and performance of athletes.

6. **From:**
   EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.

   Prerequisite: BIOL 2350 or BIOL 2010. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included.

   To:
   EXPW 4440- Physiology of Exercise. Lec. 3. Credit 3.

   Prerequisite: BIOL 2350 or BIOL 2010 and EXPW 2900. During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human

body. Application of principles to physical fitness, physical education, and athletics is included.

F. Proposal/Approval of Physical Education Practitioner Concentration

This serves as request for consideration in the Exercise Science department a new concentration named Physical Education Practitioner. This will be a track for students who are interested in teaching physical education but for whatever reason cannot complete at the undergraduate level in a timely manner. Often times students switch concentrations and then attend graduate school in the Master's plus 20 hours program to get a teaching license. It is our experience that students who do this miss relevant pedagogical content. If a student changes to this practitioner concentration, they will have the benefit of continuing to prepare to become a teacher, and will be much more academically prepared if they do go to graduate school and seek a teaching license. A side-by-side comparison of the current licensure concentration and the proposed practitioner concentration. Students who take this path will have ample time to get a minor as well.

G. Proposal/Approval of Exercise Physiology Concentration

This serves as request for consideration for the Exercise Science department to offer a new concentration in Exercise Physiology. Students who complete this concentration will be academically prepared to take the certification exam for exercise physiology. In researching the requirements for students to sit for the exam, only 2 classes that are not presently offered in the department must be offered. Two classes have been proposed and approved previously, in preparation for this request. A side-by-side comparison of the current fitness and wellness concentration and the proposed exercise physiology concentration.

H. Name Change of PHED 1170

From:
PHED 1170 – Karate Credit 1

To:
PHED 1170 – Kempo Karate Credit 1.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

6. Foreign Language

I. Course Deletion.

A. FREN 3100 - French Phonetics
Lec. 3. Credit 3.

Prerequisite: FREN 3010. Detailed analysis of the significant features of the French sound system, intonation patterns, and graphic representations of phonemes. Qualified students may be able to take this course without the prerequisite by contacting the instructor.

Apply to: Foreign Languages, French Option 1, B.A.
Foreign Languages, French Option 2, B.A.

B. Curriculum Changes.

1. From:

Senior Year
First Semester
Electives Credit: 12.
FREN 3100 - French Phonetics Credit: 3.

To:

Senior Year
First Semester
Electives Credit: 12.
FREN 3200 - Business French Credit: 3. or
FREN 4810 (5810) - Special Topics in French Credit: 3. or
FREN 4910 - Directed Studies in French Credit: 1-6 per semester.
Maximum 16. (Three hours required)

Apply to: Foreign Languages, French Option 1, B.A.
Foreign Languages, French Option 2, B.A.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

7. Earth Sciences

A. Title Change of GEOG 2100 (4 Credits) from "Introduction to Meteorology" to "Weather and Climate Systems".

GEOG 2100 (Introduction to Meteorology) (4 credits) is a General Education laboratory course that fulfills the natural science requirement. The course has been taught under its current title for 4 years and it has been realized that the title is too narrow, and may cause confusion. The new title "Weather and Climate Systems"

better describes the information delivered in the course. The new title also will bring the course in-line with similar courses taught at other universities. Many of these institutions use the title "Weather and Climate" (or something similar) to describe their 1000 level atmospheric science course that fulfills the general education natural science requirement. (See addendum to this memo on following page). Also attached is a typical course syllabus for GEOG 2100, note how the title 'Weather and Climate' better fits the course material.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

8. **Physics**
   A. **Course Additions.**

ASTR 4901, 4902, 4903, 4904. Special Topics in Astronomy.

Lec. 0 to 3, Lab. 0 to 3, Credit 1 to 4

Prerequisites: Consent of Chair and Instructor. (Up to 6 credits may be earned under this course title provided the content is different.) Topics covered will be chosen on the basis of student interest and need.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

9. **Physics**
   A. **Course Additions.**
      1. BIOL 4110 (5110) – Microbial Evolution
         Lec. 3. Credit 3.

         Prerequisite: BIOL 3200 or BIOL 3230. Survey of microbial diversity and an in-depth evaluation of evolutionary mechanisms that lead to microbial speciation.

      2. BIOL 4860 (5860) – Disease Prevention
         Lec. 3. Credit 3.

         Prerequisite: Sophomore Standing. Mechanisms of disease transmission, persistence of pathogens, and infection control.

      3. BIOL 4870 (5870) – Microbiomes
         Lec. 3. Credit 3.

         Prerequisite: BIOL 3200 or 3230. An in-depth look at how the microbes in and on the human body affect everyday life and health.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

B. Concentration Changes.

Program Changes – We propose that the following options in the Biology B.S. Degree, Biology Concentration (Botany, Marine Biology, Microbiology, and Zoology) be elevated to the level of concentration. To accomplish this, we are creating four new concentrations and deleting the Biology Concentration after an adequate phase-out period. We have consulted with Dr. Huo, Associate Provost, and she has provided input on appropriate forms and procedures that must be followed. Attached are THEC forms requesting the creation of the new concentrations and deleting the old one, curriculum comparison tables for each of the new concentrations, and new catalog listings for each of the new concentrations.

A high percentage of the curricula in the old options and the corresponding new concentrations are the same (See attached comparison tables), but we reviewed each curriculum carefully and made some significant changes to each. These significant changes are listed below.

a. None of the four concentrations continue to require a Geology / Physics two course sequence. Botany and Marine Biology require GEOL 1040, Zoology requires either GEOL 1040 or PHYS 2010, and Microbiology does not require any geology or physics courses. However, sufficient free electives are available in the Microbiology Concentration for students to take a two-part physical science sequence if required for graduate or professional school.
b. All four concentrations now provide an option of BIOL 3200 (General Microbiology) or BIOL 3230 (Health Sciences Microbiology) instead of the previously required BIOL 3200 because of our inability to meet student demand, often requiring substitutions of these courses.
c. Additional directed electives have been added to the lists of most of the concentrations, and the number of required directed electives has been increased in the Botany, Microbiology, and Zoology Concentrations.
d. Additional required classes have been added to the Botany and Microbiology Concentrations, and one required course has been moved to the list of directed electives in the Zoology Concentration. Most of the courses in bullets C and D are biology courses, and none of these changes should significantly change enrollment patterns in any of the courses.
e. Three new courses are proposed for the Microbiology Concentration; one is required and the other two will be included in the list of directed electives.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

10. **History**

A. Addition of New Course.

1. HIST 3430: Digital History

Catalog Description:
Lec. 3 Credit 3. Introduces students to the field of digital history with a particular focus on both theory and practice.

**The department/college has stated they will cover the cost of this course*

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

B. Curriculum Changes.

1. Modify Footnote 1 on the History B.A. program sheet and footnote 3 on the History B.S. program sheet to incorporate recent additions to the curriculum.

Add:
Hist 3390 U.S. Civil Rights Movement History, which was approved during the first curriculum committee meetings of the Spring 2020 semester, to the list of courses approved to fulfill the upper-division American History requirement.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

11. **Honors**

A. Creation of New Minor.

The Honors minor will recognize students who complete all required Honors academic requirements as specified in the Honors Charter and its By-Laws. The designation of the minor recognizes intellectual inquiry as the highest priority for Honors students. Offering a minor will encourage students of high potential to stay actively involved in challenging academic options that will better prepare them for their professional careers through a program of high-impact practices fostering research, creative problem-solving, service leadership, and civic engagement.

The Honors Minor will require 22 credit hours, consistent with current Honors credit requirements:

- Honors 1010: Introduction to Honors (1 cr)
- 15 credit hours distributed across at least three disciplines, selected from the following:

Honors sections of courses in the disciplines

Honors recitations or seminars in the disciplines

Honors Contracts (as arranged by proposal in non-Honors course sections)

Honors Experiential Learning (as arranged by proposal for study abroad, faculty-mentored research, internships, or civic engagement leadership)

HON 2000-level offerings

- 6 credit hours from the following:

A minimum of one Honors Colloquium (3 credits), except in cases of pre-approved substitution with another option in this section due to the priority of fulfilling major requirements.

Distinction in the Major for Chemical Engineering students (continued)

Other Honors Upper Division in the Major options

Honors Directed Studies

Honors Thesis Option

Courses taken for graduate-level credit in the student's major field

B. Honors Charter Amendments necessary to enact the change:

- Add a new ARTICLE IX: The Honors Minor

  The Honors minor will recognize students who complete all required Honors academic requirements as specified in the Honors Charter and its By-Laws. The designation of the minor recognizes intellectual inquiry as the highest priority for Honors students. Offering a minor will encourage students of high potential to stay actively involved in challenging academic options that will better prepare them for their professional careers through a program of high-impact practices fostering research, creative problem-solving, service leadership, and civic engagement.

  The requirements for the minor will not affect nor will they replace the existing requirements for graduating in cursu honorum, the highest level of achievement, the requirements for which are specified in the By-Laws.

  The Honors minor will be available only to students who have been admitted to the Tech Honors Program. The student must remain actively involved in fulfilling Honors credit requirements as described in the By-Laws.

The minor must be completed within the timeframe required for students' major requirements; e.g, students cannot postpone their graduation in order to complete Honors minor requirements. All other existing requirements for completing Honors academic options in a timely and consistent manner will apply to the minor.

- Change numbering on current Article IX, Rules of Order, to become Article X.

Honors By-Laws Amendments necessary to enact the change:

- Change the heading for ARTICLE VIII to be entitled Article VIII A. Graduation in cursu honorum.
- Add a new Article VIII B. Honors minor requirements:

The Honors Minor will require fulfillment of 22 credit hours distributed across at least three disciplines, as specified for graduation in cursu honorum, and the maintenance of a 3.1 GPA in courses taken as a full-time student at Tennessee Tech.

Any temporary interruption in the student's progress toward fulfilling Honors Minor requirements must be approved by the Honors director, and will require a reasonable plan for completion.

While Honors students will not be required to declare the minor, they will be encouraged to do so except in circumstances that would interfere with progress in their major.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

12. <u>Mathematics</u>

A. Course Additions.

1. The Mathematics Department proposes the addition of four new courses.

   MATH 1835: Further Topics in Applied Calculus Lec. 1 Cr. 1
   Prerequisite: none

   Corequisite: MATH 1830

   Course Description:
   Includes systems of linear equations, linear programming, exponential and logarithmic equations, partial differentiation, separable and linear differential equations. This course is designed to enhance students' understanding of calculus and its applications to Economics.

2. MATH 4060/5060: Topics in Cryptography Lec. 3 Cr. 3

Prerequisite: C or better in MATH 2010 and C or better in either MATH 3400 or CSC 2700.

Course Description:
Fundamental concepts of cryptography presented with mathematical background (including groups, fields, elements of number theory, probability and statistics). Special attention will be given to the RSA algorithm, Elliptic Curve Cryptography, the ElGamal public key cryptosystem, Diffie-Hellman key exchange and pseudo random number generators.

3. MATH 4550/5550: Mathematics of Investment I Lec. 3 Cr. 3

   Prerequisite: C or better in MATH 1920 or consent of instructor.

   Course Description:
   Topics include examination of annuities, loans, bonds and other securities, portfolio, immunization, interest rate swaps.

4. MATH 4560/5560: Mathematics of Investment II Lec. 3 Cr. 3

   Prerequisite: C or better in both MATH 4550/5550 and MATH 4470/5470, or consent of instructor.

   Course Description:
   Topics include derivative securities, mathematical models of financial risk management, and corporate finance.

B. Curriculum Changes.

A. Add:

MATH 4050-MATH 4060 and MATH 4550-MATH 4560 to the list of Applied Mathematics Course Sequences in the BS in Mathematics curriculum.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

13. <u>Art, Craft & Design</u>

A. Course Additions.

1. ART 3540: Intermediate Wheel-Throwing, Stu.6. Credit 3.
   Pre-requisites: ART 2510: Introduction to Clay and ART 2540: Introduction to Wheel-Throwing

Description: Continued advanced skill development of wheel-throwing techniques. Indepdent glaze formulation and testing introduction.

2. **Course Changes.**

   a. **From:**
   ART 3510-Clay on the Wheel

   To:
   ART 2540-Introduction to Wheel-Throwing

   b. ART 3820-Metals Studio-Blacksmithing
   Delete prerequisite: ART 2810-Introduction to Metals

   c. Add ART 3540: Intermediate Wheelthrowing , studio 6, credits 3.

   Prerequisites: ART 2510: Introduction to Clay, ART 2540: Introduction to Wheelthrowing

   Recommended completion of course in fall Sophomore year..

   d. MOVE ART 3510: Clay on the Wheel from fall Sophomore year to spring Freshman year and CHANGE course number and name to ART 2540: Introduction to Wheelthrowing, Studio 6, credits 3.

   e. Move ART 1250: Introduction to Digital Imaging from fall Sophomore year to spring Sophomore year, Studio 6, credits 3.

   f. Move ART 1350: Foundations Studio II from spring Freshman year to fall Sophomore year, Studio 6, credits 3.

   g. Remove ART 2810: Intro to Metals as prerequisite for ART 3820: Metals Studio-Blacksmithing
   Studio 6, credits 3.

   h. Change ART 3510: Clay on the Wheel to ART 2540: Introduction to Wheelthrowing
   Studio 6, credits 3.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

14. **<u>Civil & Environmental Engineering</u>**
    A. **Catalog Curriculum Changes.**

1. Add CEE 4810 (5810) Foundation Engineering as a Structural Engineering sequence course, as indicated in Footnote 5.

Approved CEE Sequences:

- CEE 4130 (5130), CEE 4160 (5160), CEE 4190 (5190)
- CEE 4130 (5130), CEE 4350 (5350), CEE 4360 (5360), CEE 4380 (5380), CEE 4700 (5700), CEE 4810 (5810)
- CEE 4410 (5410), CEE 4420 (5420), CEE 4430 (5430), CEE 4440 (5440), CEE 4450 (5450)
- CEE 4600 (5600), CEE 4610 (5610), CEE 4630 (5630), CEE 4640 (5640), CEE 4660 (5660)

- Structural Mechanics
- Structural Engineering
- Environmental Engineering
- Transportation Engineering

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

15. Computer Science

A. Course Changes.

1. From:
CSC 1310 - Data Structures and Algorithms
Lec. 3. Lab. 2. Credit 4.

Prerequisite: C or better in CSC 1300; or C or better in CSC 2100 and CSC 2101. Abstract data types and fundamental data structures including stacks, queues, and trees; algorithms to search, sort, and manipulate data using such structures; and introduction to runtime analysis. Students complete a series of weekly laboratory exercises for developing proficiency in implementing and utilizing data structures.

To:
CSC 1310 - Data Structures and Algorithms
Lec. 3. Lab. 2. Credit 4.

Prerequisite: C or better in CSC 1300; or C or better in CSC 2100 and CSC 2101; and MATH 1910. Abstract data types and fundamental data structures including stacks, queues, and trees; algorithms to search, sort, and manipulate data using such structures; and introduction to runtime analysis. Students complete a series of weekly laboratory exercises for developing proficiency in implementing and utilizing data structures. MATH 1910 may be taken concurrently.

2. **From:**

CSC 3300 - Database Management Systems
Lec. 3. Credit 3.

Prerequisite: Junior Standing; and C or better in CSC 1310 or both CSC 2110 and CSC 2111. Organization and management of large data files; data definition; database models; query languages; crash recovery; concurrency control; and case studies.

To:

CSC 3300 - Database Management Systems
Lec. 3. Credit 3.

Prerequisite: ~~Junior Standing; and~~ C or better in CSC 1310 or both CSC 2110 and CSC 2111; and either CSC 2700 or ECE 2110. Organization and management of large data files; data definition; database models; query languages; crash recovery; concurrency control; and case studies.

3. **From:**
CSC 4040 - Undergraduate Computing Research Experience
Credit 3.

Prerequisite: C or better in CSC 3040 and consent of instructor. This course combines instruction on how to perform computing research with a faculty-mentored research project.

To:
CSC 4040 - Undergraduate Computing Research Experience
Credit 3.

Prerequisite: ~~C or better in~~ CSC 3040 and consent of instructor. This course combines instruction on how to perform computing research with a faculty-mentored research project.

4. **From:**
CSC 4990 - Computer Science Internship
Credit 3 or 6.

Prerequisite: Department approval, C or better in CSC 3030, CSC 3550, and CSC 3300. Part-time employment in a professional or institutional situation related to the student's area of concentration in Computer Science. This course may be taken as two 3-hour courses or one 6-hour

course. The 6-hour option will be approved in only very limited circumstances.

To:
CSC 4990 - Computer Science Internship
Credit 3 or 6.

Prerequisite: Department approval, ~~C or better in CSC 3030, CSC 3550,~~ CSC 3040 and CSC 3300. Part-time employment in a professional or institutional situation related to the student's area of concentration in Computer Science. This course may be taken as two 3-hour courses or one 6-hour course. The 6-hour option will be approved in only very limited circumstances.

B. Course Changes.

1. From:
CSC 4220 - Data Mining and Machine Learning
Credit 3. Lec. 3. Credit 3.

Prerequisite: C or better in CSC 2400 and CSC 3220. Introduction to a solid grounding in machine learning concepts as well as practical advice on applying machine learning tools and techniques in real-world data mining situations, including preparing inputs, interpreting outputs, evaluating results, and the algorithmic methods at the heart of successful data mining. Students will also be introduced to the latest advances in the field, including data transformations, ensemble learning, massive data sets, multi-instance learning, with an application towards the leading edge of contemporary research.

To:
CSC 4220 - Data Mining and Machine Learning
Credit 3.

Prerequisite: ~~C or better in~~ CSC 2400 and CSC 3220. Introduction to a solid grounding in machine learning concepts as well as practical advice on applying machine learning tools and techniques in real-world data mining situations, including preparing inputs, interpreting outputs, evaluating results, and the algorithmic methods at the heart of successful data mining. Students will also be introduced to the latest advances in the field, including data transformations, ensemble learning, massive data sets, multi-instance learning, with an application towards the leading edge of contemporary research.

2. From:

CSC 4760 (5760) - Parallel Programming
Credit 3. Lec. 3. Credit 3.

Prerequisite: C or better in CSC 2400 and CSC 2500. Foundations of parallel computing including the parallel computer architectures, principles of parallel algorithm design, OpenMP and MPI programming models for shared- and distributed-memory systems, along with numerical and non-numerical algorithms for parallel systems.

To:

CSC 4760 (5760) - Parallel Programming
Credit 3. Lec. 3. Credit 3.

Prerequisite: ~~C or better in~~ CSC 2400 and C or better in CSC 2500. Foundations of parallel computing including the parallel computer architectures, principles of parallel algorithm design, OpenMP and MPI programming models for shared- and distributed-memory systems, along with numerical and non-numerical algorithms for parallel systems.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

16. **Electrical & Computer Engineering**

A. **Course Additions and Changes**.

1. ECE 2851. Principles of Electric Circuits Lab. Lab. 3. Credit 1. Prerequisites: C or better in MATH 1920, C or better in MATH 2010, C or better in MATH 2120, either C or better in CSC 1300 or C or better in ENGR 2121, and either C or better in ECE 2010 or C or better in ECE 2850 (ECE 2010, ECE 2850, and/or MATH 2120 may be taken concurrently). Introduction to electrical and electronic components, dc- and ac-circuits, test equipment, and measurement techniques. Will not count for credit for Electrical Engineering or Computer Engineering majors.

2. ECE 3850. Intermediate Principles of Electric Circuits. Lec. 3. Credit 3. Prerequisites: C or better in ENGR 1120, C or better in ECE 2850, C or better in ECE 2851, C or better in MATH 2010, C or better in MATH 2120, and C or better in ENGR 2121 (ECE 2851 may be taken concurrently). Continuation of ECE 2850. Additional circuit analysis, additional Laplace transform methods for electric circuit analysis, additional circuit simulation with SPICE. Will not count for credit for Electrical Engineering or Computer Engineering majors.

3. **From:**
ECE 2001. Computer-Aided Engineering in ECE. Lec. 1. Credit 1.
Prerequisite: C or better in CSC 1300, C or better in ECE 2010, and C or better in MATH 2010 (ECE 2010 may be taken concurrently).
Engineering problem formulation for computer calculations. Computer aided engineering software with applications in electrical and computer engineering.

To:
ECE 2001. Computer-Aided Engineering in ECE. Lec. 1. Credit 1.
Prerequisite: C or better in CSC 1300, C or better in ECE 2010, C or better in MATH 1920, ~~and~~ C or better in MATH 2010, and C or better in MATH 2120 (ECE 2010 and/or MATH 2120 may be taken concurrently).
Engineering problem formulation for computer calculations. Computer aided engineering software with applications in electrical and computer engineering.

4. **From:**
ECE 3010. Signals and Systems. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 2001 and C or better in ECE 2020.
Time-domain and frequency-domain analysis of signals and systems, applications of Fourier series, Fourier transform, and Laplace transform in circuits and systems; Analog filters.

To:
ECE 3010. Signals and Systems. Lec. 3. Credit 3.
Prerequisite: C or better in either ECE 2001 or ENGR 1120, and C or better in either ECE 2020 or ECE 3850. Time-domain and frequency-domain analysis of signals and systems, applications of Fourier series, Fourier transform, and Laplace transform in circuits and systems; Analog filters.

5. **From:**
ECE 3300. Electronics I. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 2011, C or better in ECE 2020, and C or better in ECE 3010 (ECE 3010 may be taken concurrently). Introduction to semiconductor junction devices and their physical operation, mid-band equivalent circuits, single and multi-stage amplifiers, and SPICE simulation.

To:
ECE 3300. Electronics I. Lec. 3. Credit 3.

Prerequisite: C or better in either ECE 2011 or ECE 2851, C or better in either ECE 2020 or ECE 3850, and C or better in ECE 3010 (ECE 3010 may be taken concurrently). Introduction to semiconductor junction devices and their physical operation, mid-band equivalent circuits, single and multi-stage amplifiers, and SPICE simulation.

6. **From:**
ECE 4610. Power System Analysis. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 3610.
Power system components modeling in steady state, per unit calculations, transmission line steady state operation, power flow analysis, applications of commercial software.

To:
ECE 4610. Power System Analysis. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 3610.
Power system components modeling in steady state, per unit calculations, transmission line steady state operation, power flow analysis, economic dispatch, applications of commercial software.

7. **From:**
ECE 4620. Power System Operation and Control. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 4610 (5610).
Symmetrical components, fault analysis, system protection, transient stability, power system controls including: automatic generation control, voltage regulation, and economic dispatch.

To:
ECE 4620. Power System Operation and Control. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 4610 (5610).
Symmetrical components, fault analysis, system protection, transient stability, power system controls including: automatic generation control~~,~~ and voltage regulation~~, and economic dispatch~~.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

17. **<u>General & Basic Engineering</u>**
    A. **Course Changes.**
        1. **From:**
ENGR 2121: Engineering Applications in C
Catalog Data: Lec. and Lab. 2. Cr. 1.
Prerequisite: ENGR 1120. Corequisite: MATH 1920. C language programming for engineering applications. Effective use of functions,

arrays, pointers, and data structures. Modular program design. Program validation and documentation.

To:
ENGR 2121: Engineering Applications in C++
Catalog Data: Lec. and Lab. 2. Cr. 1.
Prerequisites: ENGR 1120. C++ language programming for engineering applications. Effective use of functions, arrays, pointers, and data structures. Modular program design. Program validation and documentation.

2. Add:
ENGR 1210 Introduction to Engineering (1 cr. hr.) to the program of study for Basic Engineering

B. Curriculum Changes to BSE Program.

1. Remove ENGR 1020 Connections to Engineering and Technology (1 cr. hr.) from the 128 cr. hr. BSE Program. ENGR 1020 will still be required, but it will be outside of the 128 cr. hrs.
2. Add ENGR 2121 Engineering Applications in C++ (1 cr. hr.) to the BSE Program.
3. Remove ENGR 4500 Reliability and Quality Engineering (3) from technical elective list.
4. Remove ETSU ENTC 4060 Project Scheduling (3) from the technical elective list.
5. Remove ETSU MGMT 3100 Production/Operations Management (3) from the technical electives list.
6. Add ETSU ENTC 4257 Plant Layout and Materials Handling (3) to the technical elective list.
7. Add ETSU ENTC 4237 Ergonomics and Process Optimization (4) to the technical elective list.
8. Add ECE 3010 Signals and Systems (3) to the technical elective list.
9. Add ECE 3210 Control System Analysis (3) to the technical elective list.
10. Remove ENGR 2810 Electrical Engineering Fundamentals I (3), ENGR 2820 Electrical Engineering Fundamentals II (3), and ENGR 2821 Electrical Engineering Fundamentals Lab (1).
11. Add ECE 2850 Principles of Electric Circuits (3), ECE 2851 Principles of Electric Circuits Lab (1), and ECE 3850 Intermediate Principles of Electric Circuits (3).

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

18. <u>Chemical Engineering</u>

A. Course Additions.

1. CHE 4340 – Introduction to Rheology

Lec. 3 Credits 3
Prerequisites: CHE 3121

Catalog Description:
This course introduces the science of Rheology and its applications in chemical and petrochemical, food, pharmaceutical, and polymer industries. The concepts of Non-Newtonian behavior and continuous deformation are followed by discussions of viscosity and factors affecting viscosity of fluids, viscosity measurements and rheometers, shear diagrams, rheological equations of state, Bingham materials, shear thinning and shear thickening fluids, thicksotropy & time dependency, dilatent materials, viscoelastic materials, as well as various governing rheological and fluid flow equations and their applications. Industrial Applications are discussed via case studies of topics selected by students and presented to class.

2. CHE 4560 - Agile Manufacturing
Lec. 3 Credits 3
Prerequisites: CHE 4410

Catalog Description:
This course provides an introductory overview of several manufacturing strategies. It starts with a review of the characteristics of Mass Manufacturing and Lean Manufacturing and introduces the concept of Agile Manufacturing. It is proposed that the businesses practicing 'mass manufacturing' tend to invest funds in equipment and facilities as opposed to technology, people and information systems. Businesses practicing 'lean manufacturing' become cost efficient producers of goods and services by reducing waste and investing in technology. However, businesses practicing 'agile manufacturing' invest in people and information systems, respond quickly to market changes and anticipate the future demands of customers. The course covers the differences among the various modes of manufacturing as well as the advantages and disadvantages that each offers and introduces students to topics, such as: concept-to-cash time, virtual organizations, rapid Response to unanticipated changes, customer-focus approach, supply chain management, and innovation and implementation of advanced technologies. Additionally, brief discussions of 'event-oriented thinking' versus 'systems-thinking' will be included. The lectures will be followed by several case studies. Students will be asked to research individual cases involving real companies, based on publicly available literature, evaluate them, based on agile manufacturing criteria that they have learned in class, and regularly present their findings and conclusions in form of reports and presentations to the class as a whole.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

19. **Business**

A. **Curriculum changes.**

For many years, all students who wanted to pursue a major or concentration leading to the Bachelor of Science in Business Administration were required to first complete the 60-credit hours of the Basic Business major, a non-degree-granting major. Upon completion, they would then matriculate into the major or concentration of their choice and complete the remaining 60-credit hours specific to that area.

In Fall 2019, the College of Business removed that requirement, and students may now be admitted to the major or concentration of their choice as freshmen. The Basic Business major continues to function as a first-step for students who know they want to major in business but still need time to select their specific path. However, we want students to select their major in a shorter amount of time.

This proposal recommends the reduction of the Basic Business major from 60-credit hours to 30-credit hours. This change will not affect transfer agreements or Tennessee Transfer Pathway programs associated with Tennessee community colleges.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

20. **Decision Sciences and Management**

A. **Course Additions and Changes.**

1. **DS3865 (3 hours) Business Database Management 2**

Prerequisite: DS3860 or consent of instructor. Developing database systems using Structured Query Language (SQL)

2. **DS4230 (3 hours) Advanced Business Analytics 2**

Prerequisite: DS3620 or consent of instructor. Students will be introduced to data analytics using Python. The course will cover the basics of Python programming using Jupyter Notebook as the preferred environment. We will also discuss data manipulation and cleaning techniques using pandas library and data structures using Series and DataFrame. By the end of the course, students will be able to use Python for acquiring, cleaning, analyzing, exploring, and visualizing data for the purpose of making data-driven decisions, while effectively communicating the results.

3. **DS4210 Business Intelligence**
   Change from: Prerequisite DS3860
   Change to: Pre/Co-requisite DS3860

4. **DS4330 Management Systems Analysis**
   Change from: Prerequisite DS3860
   Change to: Pre/Co-requisite DS3865

5. **DS4510 Business Intelligence and Analytics Capstone**
   Change from: DS4210 and Pre/Co-requisite DS4220
   Change to: Pre/Co-requisite DS4210, DS4220, DS4230

B. Change Concentration to a Major.

The Business Information & Technology (BIT) Concentration has a long history at Tennessee Tech, but as a concentration, it does not appear on the university's list of majors. In the new TTU Strategic Plan, the university boldly identifies itself as "Tennessee's technological university." As the university further distinguishes itself as a premier technological university, the BIT Concentration needs greater visibility to attract good students, attract good faculty, and establish the College of Business as a primary provider of BIT graduates.

The BIT Concentration at Tennessee Tech supplies the workforce with skilled employees who perform a variety of important functions. The need for these employees is increasing nationwide and within Tennessee. Projections Managing Partnership (PMP) predicts an increase of 26.9% in the need for Computer and Information Systems Managers by 2026 in Tennessee. Only 4 states are projected to have higher growth for this occupation. PMP projects similar growth for other occupations in Tennessee supplied by the BIT Concentration. The demand for Computer Network Specialists in Tennessee, for example, is projected to increase by 21.3% (4th highest in the US) and the demand for Database Administrators is projected to increase by 22.5% (6th highest in the US). Changing this concentration to a major will increase the visibility of the program and help us better meet the needs of the workforce.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

21. <u>Economic, Finance and Marketing</u>

A. Prerequisite Change.

1. Change the prerequisite for ECON 4510 (5510)

   From:
   ECON 4510 (5510) International Trade and Finance
   Lec. 3. Credit 3.

Prerequisite: ECON 2010, ECON 2020, and one of the following: ECON 3320, ECON 3810, or ECON 3820.

To:
ECON 4510 (5510) International Trade and Finance
Lec. 3. Credit 3.
Prerequisite: ECON 2010 and ECON 2020.

B. Catalog Changes.

1. Remove FIN 4510 International Trade and Finance from catalog

C. Program Changes.

1. Change the BSBA in Economics program
   From:
   BSBA in Economics

   To:
   BS in Economics

   a. Remove ECON3320, BMGT3720, DS3520, DS3620 and DS3841 from the 120 hours needed for graduation.
   b. Add ECON3630 and ECON4640/5640 to Economics major requirements.
   c. Change BMGT4930 to 'BMGT4930 or ECON4900/5900' in Economics major requirements.
   d. Add 9 hours of ECON-related Directed electives. ECON-related Directed electives includes any business class 3000 and above and/or math classes above 1830 approved by advisor or social science classes approved by advisor].

2. PROPOSED CURRICULUM BACHELOR OF SCIENCE IN ECONOMICS (120 hours total):
   1. Gen Ed (41 hours)
      ENGL1010, ENGL1020, PC2500, HIST2010, HIST2020, NAT SCIENCE (8 hours), HUFA (9 hours),
      MATH1130, Social Science (6 hours): ECON2010, ECON2020

   2. General Business (27 hours)
      ACCT2110, ACCT2120
      BMGT3510
      DS2810
      FIN3210, LAW2810, MKT3400
      ECON3610
      BUSINESS ELECTIVE (3 hours)

   3. Major (42 hours)

MATH 1830
ECON3810, ECON3820
ECON4510/FIN4910
ECON3630 (Business Stat II)
ECON4640/5640 (Econometrics)
ECON ELECTIVES (12 hours)
Directed ELECTIVES (9 hours)
ECON 4900/5900 or BMGT 4930

3. ELECTIVES (10 hours)

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

22. <u>Mechanical Engineering</u>

D. Curriculum Changes, Additions and Deletions.

1. **From:**

MET 3060 – Computer Numerical Control Machining Practices
Catalog Data: Lec. 2, Lab 3, Cr. 3.

Prerequisite: MET 2065.
Theory of numerical control equipment and programming for machine setup and operation of CNC equipment.

To:
MET 3060 – Computer Numerical Control Machining Practices
Catalog Data: Lec. 2, Lab ~~3~~2, Cr. 3.

Prerequisite: ENGR 1120 and MET 2065. Theory of numerical control equipment and programming for machine setup and operation of CNC equipment.

2. **From:**
MET 2065 – Metal Manufacturing Technology
Catalog Data: Lec. 1, Lab 3, Cr. 2.

Prerequisite: ENGR 1110, MET 1100 and MATH 1730 or (MATH 1710 +MATH 1720). Machine tool functions, use of hand tools, precision measurement, welding and fabrication of metals.

To:
MET 2065 – Metal Manufacturing Technology
Catalog Data: Lec. 1, Lab 2, Cr. 2.

Prerequisite: ENGR 1110, MET 1100 and MATH 1730 or (MATH 1710 MATH 1720). Machine tool functions, use of hand tools, precision measurement, welding and fabrication of metals.

3. **Delete:**
   MET 2310 – Applied Fluid Power

   Catalog Data: Lec. 2, Cr. 2.
   Prerequisite: MATH 1730 or (MATH 1710 + MATH 1720).
   This course covers the basic of pneumatic, electro-pneumatic and hydraulic control circuits in automated systems.

4. **Delete:**
   MET 3000 - Principles of Metal Casting
   Catalog Data: Lec. 1, Lab 2, Cr. 2.
   Prerequisite: ENGR 1110, MET 1100 and ME 3110 or MET 3100. Co-requisite: ME 3110 or MET 3100.
   Principles of molding and casting aluminum, brass and gray iron. Use of cores, patterns and machine molding included.

5. **Delete:**
   MET 3301 – CAD for Technology
   Catalog Data: Lec. 1, Lab 2, Cr. 2.
   Prerequisite: ENGR 1110.
   CAD techniques for industrial applications with laboratory experiences.

6. **Delete:**
   MET 3700 – Manufacturing Cost Estimating
   Catalog Data: Lec. 2, Cr. 2.
   Prerequisite: Junior Standing.
   This is an experiential learning course where the students participate in solving an industrial problem. This course requires the application of computer aided design, bill of materials, manufacturing processes, process design, writing a report, and presentation of results.

7. **Delete:**
   MET 3710 – Methods Design and Work Measurement
   Catalog Data: Lec. 2, Cr. 2.
   Prerequisite: Junior Standing.
   Introduction to concepts and the practice of methods improvement and work measurement for lean manufacturing.

8. **Add:**
   MET 3003 - Principles of Metal Casting
   This 3-credit course replaces MET 3000 (2 credits). The following catalog information for MET 3003 shows the changes from MET 3000 in red.

Catalog Data: Lec. 2, Lab 2, Cr. 3.

Prerequisite: ENGR 1110, MET 1100, and ME 3010 or MET 3100. ME 3010 or MET 3100 may be taken concurrently.

Principles of molding and casting aluminum, brass and gray iron. Use of cores, patterns, machine molding, and solidification modeling.

9. **Add:**
   MET 3303 – CAD for Technology
   This 3-credit course replaces MET 3301 (2 credits). The following catalog information for MET 3303 shows the changes from MET 3301 in red.

   Catalog Data: Lec. 2, Lab 2, Cr. 3.

   Prerequisite: ENGR 1110.

   2D CAD and 3D Solid Modeling techniques for industrial applications with laboratory experiences.

10. **Add:**
    MET 3703 – Manufacturing Cost Estimating
    This 3-credit course replaces MET 3700 (2 credits). The following catalog information for MET 3703 shows the changes from MET 3700 in red.

    Catalog Data: Lec. 2, Lab. 2, Cr. 3.

    Prerequisite: MET 2065 and MET 2615.

    This is an experiential learning course where the students participate in solving an industrial problem. This course requires the application of computer aided design, bill of materials, manufacturing processes, process design, writing a report, and presentation of results.

11. **Add:**
    MET 3713 – Methods Design and Work Measurement
    This 3-credit course replaces MET 3710 (2 credits). The following catalog information for MET 3713 shows the changes from MET 3710 in red.

    Catalog Data: Lec. 2, Lab. 2, Cr. 3.

    Prerequisite: MET 2000 MET 2065, and MET 2615.
    Introduction to concepts and the practice of methods improvement and work measurement for lean manufacturing.

12. **Curriculum Changes:**

    Deletions from Curriculum

MET 2310 – Applied Fluid Power, Credit 2.
MET 3000 – Principles of Metal Casting, Credit 2.
MET 3301 – CAD for Technology, Credit 2.
MET 3700 – Manufacturing Cost Estimating, Credit 2.
MET 3710 – Methods Design and Work Measurement, Credit 2.
MET 4310 – Plant Layout and Materials Handling, Credit 3.
ME 3010 – Materials and Process in Manufacturing, or ME 3110 – Physical Metallurgy and Heat Treatment, or MET 3100 – Applied Physical Metallurgy, Credit 3.
CSC 1300 – Introduction to Problem Solving and Computer Programming, Credit
ECON 2010 Principles of Microeconomics or ECON 2020 Principles of Macroeconomics, Credit 3.
DS 3520 – Operations Management, Credit 3.
Business Elective: BMGT 3630, BMGT 4520 (5520), DS 3620, DS 3540, FIN 3210, LAW 2810, or MKT 3400. Credit 3.

13. **Additions to Curriculum:**
ENGR 1120 – Programming for Engineers, Credit 2.
MET 3003 – Principles of Metal Casting, Credit 3.
MET 3303 – CAD for Technology, Credit 3.
MET 3713 – Methods Design and Work Measurement, Credit 3.
ME 3010 – Materials and Process in Manufacturing, or MET 3100 – Applied Physical Metallurgy, Credit 3.
ECON 2010 – Principles of Microeconomics, Credit 3.
ECON 2020 – Principles of Macroeconomics, Credit 3.
FIN 3210 – Principles of Managerial Finance, Credit 3.
LAW 2810 – Business Legal Environment and Ethics, Credit 3.
MKT 3400 – Principles of Marketing, Credit 3.

14. **<u>Changes in Concentration I</u>**
From:

Concentration I – Mechatronics Engineering Technology

MET 3060, MET 3260, ECE 3270, MET 4250 (5250) and select two courses from: MET 3460, MET 4000,MET 4060 (5060), MET 4210 (5210), MET 4220 (5220), MET 4300 (5300), MET 4400 (5400), MET 4450 (5450), MET 4500 (5500), MET 4550 (5550), MET 4600 (5600), MET 4650 (5650), MET 4700, MET 4750 (5750), MET 4990 (5990).

To:
Concentration I – Mechatronics Engineering Technology

Required: MET 3060, MET 3260, ECE 3270, and MET 4250.

Select two from the following: ~~MET 3460,~~ MET 4000, ~~MET 4060 (5060),~~ MET 4210 ~~(5210)~~, MET 4220 ~~(5220)~~, ~~MET 4300 (5300), MET 4400 (5400), MET 4450 (5450), MET 4500 (5500), MET 4550 (5550), MET 4600 (5600), MET 4650 (5650), MET 4700, MET 4750 (5750) ,~~ MET 4990 ~~(5990)~~.

15. **Changes in Concentration II**

From:

Concentration II - Engineering Technology Management

MET 4550 (5550), MET 4650 (5650) and select three courses from:
BMGT 3600, BMGT 3630, BMGT 4520 (5520), DS 3620, DS 3540, FIN 3210, LAW 2810,
BMGT 4930 (5930), MET 4430 (5430), MET 4600 (5600), MKT 3400, PSY 3400.

To:

Concentration II - Engineering Technology Management

Required: MET 4310, MET 4550 ~~(5550)~~, and MET 4650 ~~(5650)~~.~~and select three courses from:~~

Select two from the following: ~~BMGT 3600, BMGT 3630, BMGT 4520 (5520), DS 3620, DS 3540, FIN 3210, LAW 2810, BMGT 4930 (5930), MET 4430 (5430), MET 4310 (5310),~~ MET 3703, MET 4600, and MET 4990~~, MKT 3400, PSY 3400~~.

16. **Changes in Minor in Business (for MET majors)**

From:

University Undergraduate Catalog 2019-2020 Page 41.
A minor in Business for Manufacturing and Engineering Technology consists of ECON 2010, ECON 3610; BMGT 3510, DS 3520, ACCT 3720 and BMGT 3630 or BMGT 4520 (5520) or DS 3620 or DS 3540 or MKT 3400.

To:

A minor in Business for Manufacturing and Engineering Technology consists of ECON 2010, ECON 2020, ~~ECON 3610~~; BMGT 3510, FIN 3210, LAW 2810, ~~DS 3520~~, ACCT 3720 and ~~BMGT 3630 or BMGT 4520 (5520) or DS 3620 or DS 3540 or~~ MKT 3400.
Justification: This business minor is based upon on the recommendation of the College of Business. This new minor will reduce or eliminate exceptions since it is following the university business minor requirement.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

23. Agriculture

A. Course Addition.

1. AGR 2020, Strategies for Success

   This is a new course designed to provide students with the tools needed to persist and succeed in the College of Agriculture and Human Ecology at Tennessee Tech University. Topics to be covered include: learning styles, study techniques, note-taking, test-taking, personal wellness and finance, effective writing and reading, time management, career and educational planning, and interpersonal skill development.

   The primary goal of this course is to develop a "tool box" of strategies designed to make the student educational experience in the College of Agriculture and Human Ecology a successful means to reaching his/her personal educational goals.

B. Course Additions, Deletions, and Changes.

1. The changes requested will result in 58 credit hours taught in CAHE. The Primary Concentration Emphasis is 15 credit hours with 6 upper division hours. This does NOT include the 3-4 credit hours of the required core class in that discipline (Ag Business, Soil, Plant, Animal, Ag Engineering).

   There are another 12 Upper Division Agriculture Elective credit hours with potential for an additional 6 hours of Agriculture Electives and 9 Upper Division Agriculture Elective credit hours. These 15 credit hours are NOT specified as Agriculture Electives to provide flexibility for the student.

   Additions:

   AGHE 2022 – Professionalism in Ag and Human Ecology – 1 hr
   DS 2810- Computer Applications in Business 3 hrs
   Electives (9 hrs upper division) 15 hrs

2. Changes:
   From:
   AGHE 3000 Leadership and Service (3 hrs) or AGED 3010 Professional Leadership Development (3 hrs)

   To:
   AGHE 3000 Leadership and Service (3 hrs) or
   AGED 3010 Professional Leadership Development (3 hrs) or
   AGHE 3275 Research (3 hrs) or
   AGHE 3200 Study Abroad (3 hrs)

3. **From:**
   Ag Topics 4950, 4960, 4970 (1 hour if taking AGRN 2310) credit hours 2

To:
Ag Topics 4940, 4950, 4960, 4970, 4980 (2 hour if taking AGRN 3000) credit hours 2 to 3

4. **From:**
   AGRN 2000 – Soil and the Environment (3 hrs)

   To:
   AGRN 2000 Soil and the Environment (3 hrs) or AGRN 3000 Soils (4 hrs)

5. **From:**
   Primary Ag Concentration (6 hrs)

   To:
   Primary Ag Concentration (9 hrs)

6. **From:**
   Primary Ag Concentration (4000 level) 3 hrs

   To:
   Primary Ag Concentration (upper division) 6 hours

7. **From:**
   Agriculture Electives – Upper Division (18 hrs)

   To:
   Agriculture Electives – Upper Division (12 hrs)

8. **Deletions:**
   AGHE 4500 – Senior Seminar 1 credit hour

   Choose one of the following: (9 hrs)
   Directed Electives – Science
   Directed Electives – Social Science

   <u>Science options –</u>
   BIOL 1123
   BIOL 2310
   BIOL 3130
   BIOL 3330
   CHEM 3010
   CHEM 3005
   ESS 3710
   GEOL 3010

Social Science options -

AGBE 4120
AGBE 3110
AGRN 3610
AGRN 3620
AGRN 3630
ESS 3000
HEC 1030
MKT 3400
PSY 3000

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

24. Human Ecology

A. Course Deletions.

1. HEC 3520 Parent Education and Child Guidance 2 credit
Justification: Replacing with HEC 3525 see below

B. Course Additions.

1. HEC 3525 Parent-Child Relationships Lec 3. Credit 3.

Prerequisite: HEC 1010 or HEC 2200 with a grade of C or better. Parental involvement in the teaching, influence and guidance of children and adolescents; including the changing nature, dynamics, and needs of parent and child relationships throughout the lifespan.

2. HEC 3025 Professionalism in the Workplace Lec 1. Credit 1.

Prerequisite: Minimum sophomore standing. Review of social and professional standards of behavior appropriate to the work place and community settings.

3. HEC 3275 Research in Family Sciences Lec 3. Credit 3.

Prerequisite: Junior or Senior Standing. Comprehensive overview of research methodologies, ethics in research, and research presentation techniques. Review of research trends influencing Family and Consumer Sciences.

4. HEC 2035 Enrichment and Success Skills Lec 1. Credit 1.

Enrichment and success skills for students who are on academic warning, readmitted on probation or after suspension; or any student needing to improve academic skills.

5. HEC 1020 Connections in Human Ecology Lec 1. Credit 1.

   First year connections class for new freshmen. Promote connections between the University and School of Human Ecology to foster student success. Develop and apply academic success skills through a variety of learning activities.

B. Curriculum Changes.

1. **From:**

   Regarding the new "Family Sciences" minor approved at the February 2020 University Curriculum meeting: HEC 3520 Parent Education and Child Guidance was an option class listed under the "Choose 9 credits".

   To:

   Regarding the new "Family Sciences" minor approved at the February 2020 University Curriculum meeting: Replace HEC 3520 Parent Education and Child Guidance with HEC 3525 Parent-Child Relationships (3 credits) in the Choose 9 hours list of courses. Remove HEC 4055 Developing Professional Resilience (1 credit) as a choice.

2. **From:**

   Regarding the new "Child and Family Trauma Informed Care" Certificate approved at the February 2020 University Curriculum meeting: HEC 3520 Parent Education and Child Guidance was an option class listed under the Choose 2 (6 credit hours) list of courses.

   To:

   Regarding the new "Child and Family Trauma Informed Care" Certificate approved at the February 2020 University Curriculum meeting: Replace HEC 3520 Parent Education and Child Guidance with HEC 3525 Parent-Child Relationships as an option class listed under the Choose 2 (6 credit hours) list of courses. Remove HEC 4055 Developing Professional Resiliency as an option. A new THEC form is attached.

3. **From:**

   Human Ecology minor: AGHE 2022 Professionalism in Agriculture or Human Ecology; HEC 1010 Lifespan Development

   To:

Human Ecology minor: Replace AGHE 2022 with HEC 3025 Professionalism in the Workplace; HEC 1010 Lifespan Development or HEC 2065 Families in Society

4. **From:**

   All Human Ecology concentrations, AGHE 1020 Connections in Agriculture and Human Ecology 1 credit

   To:

   All Human Ecology concentrations, Replace AGHE 1020 with HEC 1020 Connections in Human Ecology

Child Life Concentration

5. **From:**

   Freshman Year: HEC 1010 Life Span Development; Fall Credits 16 credits, Spring credits 13 credits

   To:

   Freshman Year: Remove HEC 1010 Life Span Development from Freshman Year; Second semester of Freshman Year move COMM 2025 or PC 2500 to this semester. Credits in Fall of Freshman Year: 13; Spring of Freshman Year: 16; Total Credits Freshman Year: 29 credits

6. **From:**

   Sophomore Year: AGHE 2022 Professionalism; HEC 2020 Nutrition for Health Sciences, credits 15 in fall semester

   To:

   Sophomore Year: Remove AGHE 2022 Professionalism; Remove HEC 2020 Nutrition for Health Sciences; Move ENGL 2130/2235/2330 (3 credits) to Fall Semester of Sophomore Year; credits for fall semester 14; Total credits Sophomore Year: 30 credits

7. **From:**

   Junior Year Fall: AGHE 3275 Research in Agriculture and Human Ecology; HEC 3520 Parent Education and Child Guidance, Fall semester credits: 16. Junior Year Spring: COMM 2025/PC 2500, ENGL 2130/2235/2330 spring semester credits: 19

   To:

   Junior Year Fall: Replace HEC 3520 with HEC 3525 Parent-Child Relationships (3 credits); Add HEC 3100 Cultural Competence for Professionals (3 credits). Fall semester credits: 17. Junior Year Spring:

Replace AGHE 3275 with HEC 3275 Research in Family Sciences (3 credits); Add HEC 3066 Family Violence across the Lifespan (3 credits); Move COMM 2025/PC 2500, and ENGL 2130/2235/2330 to Freshman and Sophomore years (see above); Spring semester credits remain at 19 credits. Total credits Junior Year: 36 credits

8. **From:**

Senior Year Fall: AGHE 4500 Senior Seminar, credits 14

To:

Senior Year Fall: Remove AGHE 4500 Senior Seminar; credits 13. Total Credits for Senior Year: 25

Child Development and Family Relations Concentration

9. **From:**

Freshman Year, spring semester 14 credits, HEC 1010 Lifespan Development

To:

Freshman Year, spring semester: move Humanities/Fine Arts Elective Credit 3 here from Junior Year; Remove HEC 1010; Add Guided Electives 3 credits; Spring semester credits become 17 credits; Total Credits Freshman Year: 33 credits (Add note # 4 to Guided Electives) Add Note #4 to Notes Section: Guided Electives: HEC 2250 or HEC 2550 or HEC 1010 or Advisor Approved Course

10. **From:**

Sophomore year, Fall semester AGHE 2022, 16 credits. Sophomore year, Spring semester, 12 credits

To:

Sophomore year, Fall semester Remove AGHE 2022, credits in fall semester 15 credits. Sophomore year, Spring semester, Add Guided Electives 3 credits; credits in spring semester 15 credits; Total credits Sophomore Year: 30 credits

11. **From:**

Junior year, Fall semester: Humanities/Fine Arts; AGHE 3000/3200/3275 (3 credits), credits 18. Junior year, Spring semester: HEC 3290, HEC 3520, Credits 17

To:

Junior year, Fall semester: Move Humanities/Fine Arts to Freshman Year (see above); Replace HEC 3520 with HEC 3525 Parent Child Relationships (3 credits), credits 15**.** Junior year, Spring semester: Remove HEC 3290 and add Elective 3 credits.

Replace AGHE 3000/3200/3275 with HEC 3275 Research in Family Sciences (3 credits) or Guided Elective 3 credits; Add HEC 3025 Professionalism in the Workplace; credits 16; Total Credits Junior Year: 31

12. **From:**

Senior year, Fall semester AGHE 4500, total credits 13. Senior year, Spring semester elective credit 2, upper division elective credit, total credits 14

To:

Senior year, Fall semester Remove AGHE 4500; Add HEC 4055 Developing Professional Resiliency (1 credit), Add Elective Credit 1; Move ECSP Assessment of Young Children to Spring semester; Add HEC 4075 to Fall Semester Total Credits 14

Senior year, Spring semester Add ECSP 4300 to Spring semester (3 credits), Remove Elective credit and Upper Division Credit, Total Credits 12; Total Credits Senior Year 26 credits

Family and Consumer Sciences Education Concentration

13. **From:**

Freshman Year, Spring semester: AGHE 2022 Professionalism (1 credit); credits 15

To:

Freshman Year, Remove AGHE 2022 total credits spring semester 14; Total Credits Freshman year 31 credits

14. **From:**

Junior year, Fall semester, HEC 2421, AGHE 4500, credits 14. Junior year, Spring semester. HEC 3520, credits 13

To:

Junior year, Fall semester, Remove AGHE 4500, Remove HEC 2421; Add HEC 4055 Developing Professional Resilience (1 Credit); Add HEC 4075 Trauma Informed Care; Total Credits 14. Junior year, Spring semester, Replace HEC 3520 with HEC 3525 Parent Child Relationships (3 credits); total credits 14; Total credits Junior Year 28

Merchandising and Design Curriculum

15. **From:**

    Sophomore year: Fall Math 1530 3 credits, AGHE 2022

    To:

    Sophomore year: Fall Remove Math 1530, Remove AGHE 2022; Add Elective 3 credits. Credits: 15

16. **From:**
    Junior year: Fall MKT 3400, credits 15. Junior year: Spring AGHE 3000/3200/3275 3 credits, Apparel course credit 6, Note 3; Elective credit 5.

    To:

    Junior year: Fall Remove MKT 3400, Add Elective 3 credits; Add HEC 3025 Professionalism in the Workplace 1 credit; Credits 16. Junior Year: Spring Remove AGHE 3000/3200/3275; List HEC 3275 OR Guided Elective 3 credits; Remove Apparel Course credit 6, Add Apparel or Design Based Course 6 credits; Elective Credit 6. Credits 18; Total credits 34

17. **From:**

    Senior year: Spring AGHE 4500 Senior Seminar, 13 credits

    To:

    Senior Year: Spring Remove AGHE 4500, 12 credits, total credits senior year 27

18. **From:**

    Note 3: Select two. HEC 2300, HEC 3300, HEC 4300, HEC 4301.

    To:

    Note 3: Select 6 credits from Advisor Approved Apparel or Design Based Courses. Add Note 4 to HEC 4990: Note 4: Internship course is preferred to be completed during summer term to offer the most options for out of town placements.

Housing and Design Curriculum

19. **From:**

    Sophomore Year: Fall (already added HEC 1110 in a previous curriculum memo) Sophomore Year: Spring (already added HEC 1150 in a previous

curriculum memo); AGHE 2022 (already removed HEC 2411 in a previous memo)

To:

Sophomore year, Fall, HEC 1110, move HEC 2065 to Spring semester, total credits 15. Sophomore year, Spring, HEC 1150, HEC 2065, Remove AGHE 2022, total credits 15. Total Credits Sophomore Year 30 credits

20. **From:**

Junior year, spring, (already removed HEC 2460 in a previous curriculum memo), AGHE 3000/3200/3275 credits 15

To:

Junior year, spring, Add HEC 3025 Professionalism in the Workplace (1 credit); Remove AGHE 3000/3200/3275; Add Elective Credit 4; total credits 17. Total Credits Junior year 32 credits

21. **From:**

Senior year, fall, Elective Credit 3, HEC 4460. Senior year, spring, AGHE 4500, Upper division Human Ecology Electives Credit 6, credits 13

To:

Senior year, Fall, Remove Elective Credit and replace with HEC 4320 Merchandise Promotion and Advertising OR HEC 3275 Research in Family Sciences (3 credit), HEC 4460 OR HEC 4340 History of Furnishings and Dress 3 credits, credits remain 15. Senior year, spring, Remove AGHE 4500; Upper Division Human Ecology Electives credit 6 OR HEC 4990 Internship 6 credits; credits become 12. Total credits Senior Year 27 credits

Nutrition and Dietetics Curriculum

22. **From:**

Sophomore year, spring semester AGHE 2022

To:

Sophomore year, spring semester, remove AGHE 2022 and replace with Elective Credit 1 (move from Senior year) Credits remain 12, and total credits for Sophomore year remain 29

23. **From:**

Junior year, fall, AGHE 3000/3200/3275

To:

Junior year, fall, Remove AGHE 3000/3200/3275 and replace with HEC 3275 Research in Family Sciences 3 credits, credits remain the same at 18 credits

24. From:

Senior year, Fall, AGHE 4500 Senior Seminar. Senior year, Spring, Elective credit 1, credits 15

To:

Senior year, Fall, Remove AGHE 4500 Senior Seminar and replace with HEC 3025 Professionalism in the Workplace (1 Credit); credits remain at 13. Senior year, Spring, Move Elective Credit 1 to Sophomore year, credits 14. Total Credits Senior Year 27 credits

25. From:

Note: In order to become a Registered Dietitian/Nutritionist (RDN) and to practice as an RDN, the following steps must be completed:

1. After successful graduation from TTU's DPD program, gain acceptance and complete an accredited supervised practice program (Dietetic Internship).
2. Pass the Academy of Nutrition and Dietetics Registration Exam
3. Obtain appropriate licensure in the state in which you will practice.

To:

Note: In order to become a Registered Dietitian/Nutritionist (RDN) and to practice as an RDN, the following steps must be completed:

1. After successful graduation from Tennessee Tech's DPD (Nutrition and Dietetics) program, gain acceptance and complete an accredited supervised practice program.
2. Pass the Academy of Nutrition and Dietetics Registration Exam
3. Obtain appropriate licensure in the state in which you will practice.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

25. <u>Interdisciplinary Studies</u>

A. Course Additions.

1. LIST 4994– Introduction to Capstone Lec 1, Credit 1

Course Description:

The purpose of this course is to help prepare students for the Sr. Capstone Course (LIST 4995). 4995 is required of all Interdisciplinary Studies/Professional Studies majors.

Prerequisites: None

2. LIST 3991. Innovation and Entrepreneurship Studies. Lec. 0. Credit. 0.

Course Description:

The purpose of this course is to culminate the student's experience in the Certificate in Innovation and Entrepreneurship. Students enroll in this course the semester they complete the Certificate.

B. Course Changes.

1. From:

LIST 1601/3 – The Freshman Athlete Experience Lec 1, Lab 1 Credit 1 or Lec 2, Lab 2, Credit 3

Course Description: This course is an introduction to the university experience with special attention given to the unique nature of the collegiate student athlete experience.

Prerequisites: None

To:

LIST 1601/3 – The Freshman Athlete Experience Lec 1, Credit 1 or Lec 3, Credit 3

Course Description: This course is an introduction to the university experience with special attention given to the unique nature of the collegiate student athlete experience.

Prerequisites: None

2. From:

LIST 2094: Service Learning: Implementation Processes Lec 2, Lab 2, Credit 3

Course Description: This is a course in service learning focuses on the implementation of a group developed service learning project. High Impact Practices will be used through hands on activities.

To:

LIST 2094: Service Learning: Implementation Processes Lec 2, Credit 3

Course Description: This is a course in service learning focuses on the implementation of a group developed service learning project. High Impact Practices will be used through hands on activities.

C. Curriculum Changes.

1. Changes to the Innovation and Entrepreneurship Certificate

From:

TTU Innovation and Entrepreneurship Certificate:
Approved Courses

TTU Innovation and Entrepreneurship Certificate **Approved Courses to meet Achievement Requirements (October, 2017)**		
Innovative, Creative Design and Prototyping	**Entrepreneurial Perspective**	**Evidence**
Description		
Design and practice of creativity/innovation in field of practice – generally culminating in a product	Direct learning in entrepreneurship, innovation and current best practices	Participation in **two** external, independent activities that display a student's work with innovative components in research, art, science, entrepreneurship or technology.
Requirements		
3 credit hours	6 credit hours	6 credit hours equivalent,
Available courses / activities		
BMGT 4930 Business Strategy	MKT 3900 Entrepreneurship and Small Business BMGT 4900 – Special Topics in Management: Experiential Learning in Entrepreneurship MKT 3200 Entrepreneurial Mindset	"EAGLEWorks" Entrepreneurship and Innovation Competition
ME 4444 Senior Capstone Design		Active participation in research and presentation Research day at the Capitol, Poster Day at the Capitol
CHE 3121 Transfer Science II CHE 4990 Intro to Research CHEM 4970 Special Topics	CHE 4410 Capstone Design	Active participation in research and presentation at TTU Student Research Day
NURS 4981 Special Topics	ENTR 4500 – Special Problems: Lean Launchpad at TTU	Participation in a multi-disciplinary team competition at a national level sponsored by a Professional Society.
ART 4410, 4510, 4710, 4810, 4910 Senior Thesis	ART 2099 Professional Practices of the Artist	

To:

TTU Innovation and Entrepreneurship Certificate:

Approved Courses

TTU Innovation and Entrepreneurship Certificate Approved Courses to meet Achievement Requirements (Revised March 2020)		
Innovative, Creative Design and Prototyping	**Entrepreneurial Perspective**	**Evidence**
Description		
Design and practice of creativity/innovation in field of practice – generally culminating in a product	Direct learning in entrepreneurship, innovation and current best practices	Participation in **two** external, independent activities that display a student's work with innovative components in research, art, science, entrepreneurship or technology.
Requirements		
3 credit hours	6 credit hours	6 credit hours equivalent,
Available courses / activities		
BMGT 4930 Business Strategy	MKT 3900 Entrepreneurship and Small Business BMGT 4900 – Special Topics in Management: Experiential Learning in Entrepreneurship MKT 3200 Entrepreneurial Mindset ENTR 4500 – Special Problems: Lean Launchpad at TTU	"EAGLEWorks" Entrepreneurship and Innovation Competition
ME 4420 Senior Capstone Design		Active participation in research and presentation Research day at the Capitol, Poster Day at the Capitol
CHE 4990 Intro to Research CHEM 4970 Special Topics CHE 4245 Clinical Immersions	CHE 4410 Capstone Design	Active participation in research and presentation at TTU Student Research Day
NURS 4981 Special Topics NURS 4240 - Clinical Immersion for Healthcare Innovation NURS 4210 - Research in Nursing	NURS 4100 Pediatric Nursing NURS 4210 Research in Nursing NURS 3240 Introduction to Pharmacology	Participation in a multi-disciplinary team competition at a national level sponsored by a Professional Society.
ART 4411, 4412, 4413, 4414 (painting) ART 4511, 4512, 4513, 4514 (clay) ART 4611, 4612, 4613, 4614 (Fibers) ART 4711, 4712, 4713, 4714 (Glass) ART 4811, 4812, 4813, 4814 (Metals ART 4911, 4912, 4913, 4914 (Wood) Senior Thesis	ART 3099 Professional Practices of the Artist	
	LIST 4901 – Special Topics LIST 4902 – Special Topics LIST 4903 – Special Topics	
*Student should enroll in LIST – 3900 Innovation and Entrepreneurship Studies (0 credit) to indicate enrollment in the I&E Certificate program.		

*Student should enroll in LIST – 3901 Innovation and Entrepreneurship Studies (0 credit) to indicate completion of the I&E Certificate program.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

26. <u>Environmental Studies</u>

A. Course Additions.

1. ESS 4100 National parks and protected public lands

Catalog Description:

Development of the national park idea as a uniquely American idea that has spread to nations all over the globe. The concept of national parks has led to other protected land designations including state and federal forest reserves, state parks, nature preserves and natural areas, and wildlife refugees and preserves. Lec. 3 Credit 3

2. ESS 4110 Human dimensions of natural resources

Catalog Description:

Human dimensions of natural resources management uses social science perspectives for managing recreation uses and users on local, state and federally managed public lands. Concepts of carrying capacity, recreation user conflict management, and related topics are explored. Lec. 3 Credit 3.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

27. <u>Chemistry</u>

A. New Minor Additions.

1. Minor in: Pre-Professional Health Sciences Medicine, Dentistry, Optometry

Total 20-23 hours
Required: 11 hours

- CHEM 3020 Organic Chemistry II (4)
- CHEM 4610 General Biochemistry I (3)
- PHYS 2010 Algebra-based Physics I (4)

Choose: 3 courses

- CHEM 4620 General Biochemistry II (3)

- BIOL 2010 Human Anatomy and Physiology I (4)
- BIOL 2020 Human Anatomy and Physiology II (4)
- BIOL 3140 Cellular Biology (4)
- BIOL 3230 Health Science Microbiology (4)
- BIOL 3810 General Genetics (4)
- BIOL 4750 Medical Microbiology (4)
- BIOL 4040 Immunology (3)
- PHYS 2020 Algebra-based Physics II (4)
- MATH 1530 Introductory Statistics or MATH 3070 Statistical Methods I or BIOL 4220 Biostatistics (3)

Catalog Description:

A minor in Pre-Professional Health Sciences Medicine, Dentistry, Optometry will consist of 20-23 hours including CHEM 3020, CHEM 4610, and PHYS 2010 plus three additional courses chosen from: CHEM 4620, BIOL 2010, BIOL 2020, BIOL 3140, BIOL 3230, BIOL 3810, BIOL 4750, BIOL 4040, PHYS 2020, and MATH 1530 or MATH 3070 or BIOL 4220.

2. Minor in: Pre-Professional Health Sciences Pharmacy, Physician Assistant

Total 22-24 hours
Required: 16 hours

- CHEM 3010 Organic Chemistry I (4)
- BIOL 2010 Human Anatomy and Physiology I (4)
- BIOL 2020 Human Anatomy and Physiology II (4)
- BIOL 3230 Health Science Microbiology (4)

Choose: 2 courses

- ECON 2010 Principles of Microeconomics (3)
- PSY 2130 Life Span Developmental Psychology (3)
- PSY 4160 Abnormal Psychology (3)
- CHEM 3020 Organic Chemistry II (4)
- CHEM 4610 General Biochemistry I (3)
- BIOL 3140 Cellular Biology (4)
- BIOL 3810 General Genetics (4)
- PHYS 2010 Algebra-based Physics I (4)
- HIMT 1300 Medical Terminology (3)
- MATH 1530 Introductory Statistics or MATH 3070 Statistical Methods I or BIOL 4220 Biostatistics (3)

Catalog Description:
A minor in Pre-Professional Health Sciences Pharmacy, Physician Assistant will consist of 22-24 hours including CHEM 3010, BIOL 2010,

BIOL 2020, BIOL 3230 plus two additional courses chosen from: ECON 2010, PSY 2130, PSY 4160, CHEM 3020, CHEM 4610, BIOL 3140, BIOL 3810, PHYS 2010, HIMT 1300, and MATH 1530 or MATH 3070 or BIOL 4220.

3. Minor in: Pre-Professional Health Sciences Physical Therapy, Occupational Therapy

Total 21 hours
Required: 15 hours

- CHEM 1110 General Chemistry I (4)
- BIOL 2020 Human Anatomy and Physiology II (4)
- PHYS 2010 Algebra-based Physics I (4)
- PSY 2130 Life Span Developmental Psychology (3)

Choose: 2 courses

- PSY 4160 Abnormal Psychology (3)
- PSY 4300 Adult Psychology (3)
- EXPW 4420 Kinesiology (3)
- EXPW 4440 Physiology of Exercise (3)

Catalog Description:

A minor in Pre-Professional Health Sciences Physical Therapy, Occupational Therapy will consist of 21 hours including, CHEM 1110, BIOL 2020, PHYS 2010, PSY 2130 plus two additional courses chosen from: PSY 4160, PSY 4300, EXPW 4420, EXPW 4440

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

28. <u>Informational Items</u>

A. Elect UCC Committee Chair for 2020-2021
Jeremy Wendt was reappointed as the UCC Committee Chair.

Motion to approve. Lisa Zagumny
Second. Christy Killman
Vote. Motion carried

B. Course substitution link is now available on the TTU website.

No other such matters being presented, the meeting was adjourned at 4:24 p.m.