University Curriculum Committee
September 26, 2019 Meeting Minutes

The University Curriculum Committee met on **Thursday, September 26** at 3:00 p.m. in the Deans' Conference Room, Derryberry 200.

Members Present:

Melinda Anderson	Julie Baker	Doug Bates	Jeff Boles
Chris Brown	Brittany Copley	Pedro Arce	Dennis Duncan
Edith Duvier	Julie Galloway	Jerry Gannod	Mike Gotcher
Mike Harrison	Brandi Hill	Sharon Huo	Christy Killman
Allen MacKenzie	Allan Mills	Wendy Mullen	Richard Rand
Jeff Roberts	Stephen Robinson	Paul Semmes	Martin Sheehan
Barry Stein	Mark Stephens	Evan Hart	Thomas Timmerman
Jeremy Wendt, Chair	Janet Whiteaker	Brenda Wilson	Kim Winkle
Lisa Zagumny	Linda Null	Darron Smith	

Members Absent:

Rita Barnes	Lori Bruce	Chris Wilson	Satish Mahajan
Ahmed Elsawy	Steve Frye	Bruce Greene	Adam Grim
Steve Isbell	Brandon Johnson	Ben Mohr	Thomas Payne
Wesley Pech	Mohan Rao	Jennifer Shank	Courtney Fowler, Student
Emma Kenner, Student	Alexis Harvey, Student	Robert Hill, Student	

Official Representative(s):

Barbara Jared FOR	Kim Hanna	Tammy Boles FOR	Hayden Mattingly
Clark Carlton FOR	Lori Maxwell	Jessica Oswalt FOR	Joseph Slater

Guest(s):

Cari Williams	Mary McCaskey		

Outline of Proceedings:

1.	Approval of Agenda	**7.**	Chemistry
2.	Approval of March 28, 2019 Minutes	**8.**	History
3.	Human Ecology	**9.**	Interdisciplinary Studies
4.	Counseling & Psychology	**10.**	Electrical & Computer Engineering
5.	Earth Sciences	**11.**	Informational Items
6.	Art, Craft & Design		

Proceedings:

Perceiving a quorum, Dr. Wendt called the meeting to order at 3:02pm.

1. **Approval of agenda**

   Motion to approve. Jeremy Wendt
   Second. Christy Killman
   Vote. Motion carried.

2. **Approval of minutes, March 28, 2019**

   Motion to approve. Lisa Zagumny
   Second. Barry Stein
   Vote. Motion carried.

3. **Human Ecology**
   - **A. Termination of Foodsystems Concentration.**
     1) Foodsystems concentration currently has four students enrolled. Two students will graduate in August 2019, and the other two will graduate in May 2021. Low enrollment and the launch of the new Hospitality Management programs at Lipscomb University and Middle Tennessee State University have made it clear that this concentration is no longer feasible or competitive. No new students will be adding to this concentration effective Fall 2019.

   - **B. Curriculum and Course Changes.**
     1) On the Housing and Design Curriculum:
        Add HEC 1110 (fall) and HEC 1150 (spring) to Sophomore Year
        From:
        26 credits in Sophomore year

        To:
        32 credits in Sophomore year

     2) On the Housing and Design Curriculum
        Remove HEC 2411 Practicum 1 Credit
        From:
        32 credits in Sophomore Year

        To:
        31 credits in Sophomore year

     3) On the Housing and Design Curriculum
        Remove HEC 2460 from Junior Year
        From:
        Junior Year HEC 2460 2 credits, 17 credits

To:
Junior Year, 15 credits
Total Credits: Junior Year: 30 credits

4) On the Nutrition and Dietetics Curriculum:
From:
Senior Year, Remove BGMT 3510

To:
Senior Year, HEC 3390 Purchasing in Food Service Management
Credits remain the same

5) From:
Current curriculum notes:

In order to graduate with a B.S. degree, Human Ecology, concentration Child Life, the following requirements must be completed prior to graduation.

1. Students must be accepted into and successfully complete a Child Life Practicum under the direct supervision of a Certified Child Life Specialist. The practicum course may be taken in the Spring or Summer semester of the Junior year.
2. Students must be accepted into a Child Life clinical experience (internship) which is supervised by a Certified Child Life Specialist. To pass the clinical experience course, students must earn minimal entry-level competence during the internship experience.
3. Students who are unsuccessful in securing placement for an appropriate practicum may not continue on in the Child Life concentration. Students who are unsuccessful in securing an appropriate Child Life Internship prior to graduation, may NOT graduate with a degree in Human Ecology, concentration in Child Life.
4. AGHE 1020 not required for transfer students with more than 12 hours.

To:

To Be Effective Summer 2020

As an Endorsed Academic Program, Tennessee Tech's Child Life Concentration conforms to the Association of Child Life Professionals standards. In order to graduate with a B.S. degree, Human Ecology, concentration Child Life, the following requirements must be completed prior to graduation.

1. Students must apply for, be accepted into, and successfully complete a Child Life Practicum under the direct supervision of a Certified Child Life Specialist. Students who are unsuccessful in securing a Child Life Practicum or passing the child life practicum prior to graduation may NOT graduate with a degree in Human Ecology, concentration in Child Life.

2. Students must apply for a Child Life Clinical Experience (Internship) which is directly supervised by a Certified Child Life Specialist. To pass the clinical experience course, students must earn minimal entry-level competence during the internship experience.
3. AGHE 1020 not required for transfer students with more than 12 hours.

6) **From:**
HEC 4200 Advanced Nutrition Credit 3
Prerequisites: HEC 2020, CHEM 3005, BIOL 2350 and Admission to the HEC-DPD Program. Interrelationships of nutrients in metabolism at the cellular level. Current issues in nutrition.

To:
HEC 4200 Advanced Nutrition Credit 3
Prerequisites: HEC 2020, CHEM 3005, BIOL 2350 and Admission to the HEC-DPD Program.
Principles of nutrition research, including research design and methodology, analysis of peer-reviewed research, effective scholarly writing, standards of responsible and ethical research, and understanding how research impacts evidence-based practice.

7) **From:**
HEC 3100 Intercultural Competence Credit 3
Importance of intercultural competence in order to facilitate tolerance across different cultures and connect across diverse cultures.

To:
HEC 3100 Cultural Competence for Professionals Credit 3
Prerequisites: HEC 2065 and Junior or Senior Standing. Exploring various aspects of bias based on race, gender, ability levels, body size, mental health, socioeconomic status, etc; and raising awareness of the need for acceptance regardless of visible and invisible differences. HEC 2065 cannot be taken concurrently.

Motion to approve. Melinda Anderson
Second. Julie Galloway
Vote. Motion carried.

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

A. Course Additions.
Add PSY 3050 – Parapsychology, Effective Spring, 2020.
<u>Catalog Description</u> Lec. 3 Credits 3
An examination of unusual experiences such as ESP, precognition, psychokinesis, ghosts and other paranormal events and the ways these phenomena are investigated by psychologists including the methodological errors that can affect the research.
**Friendly Amendment: Add minimum grade of a C in PSY 1030 to checklist and change prerequisites from PSY 1020 to PSY 1030.*

Motion to approve. Barry Stein
Second. Julie Baker
Vote. Motion carried.

B. Curriculum Changes.

1) Psychology B.S. Biology Requirement

From:
BIOL 1010 Intro to Biology. Credit 4.

To:
BIOL 1010 Intro to Biology, or BIOL 1113 General Biology I, or BIOL 2010 Human Anatomy and Physiology I. Credit 4.

Effective: Summer 2020

2) **From:**
BIOL 1020 Diversity of Life. Credit 4

To:
BIOL 1020 Diversity of Life, or BIOL 1123 General Biology II, or BIOL 2020 Human Anatomy and Physiology II. Credit 4.

3) Psychology B.S. Math Requirement

From:
MATH 1530 Introductory Statistics or MATH 1130 College Algebra. Credit 3.

To:
MATH 1530 Introductory Statistics or MATH 1130 College Algebra, or MATH 1630 Finite Mathematics, or MATH 1710 Pre-calculus Algebra, or MATH 1720 Pre-calculus Trigonometry, or MATH 1730 Pre-calculus Mathematics, or MATH 1830 Applied Calculus, or MATH 1910 Calculus I. Credit 3.

Effective: Summer 2020

Motion to approve. Barry Stein
Second. Dennis Duncan
Vote. Motion carried.

C. Course and Curriculum Changes.

1) **Catalog Changes.**
From:
PSY 4600 (5600) – Microcomputers in Psychological Research
Lec. 1. Lab. 4. Credit 3.
Prerequisite: PSY 1030. Introduction to the use of computers in psychological

research. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

To:
PSY 4600 (5600) – Data Analytics in Psychology
Lec 1. Lab 4. Credit 3.
Prerequisites: PSY 3010 and PSY 3110 with a B or better. Advanced topics in data analysis, graphing, and interpretation of psychological measures. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Motion to approve. Barry Stein
Second. Julie Baker
Vote. Motion carried.

D. Addition of Data Analytics Certificate- Fall 2020

1) This certificate will be awarded to psychology majors who meet the criteria listed below. Psychology majors have the opportunity to receive extensive training in applied statistics, research design, and the interpretation of statistical relationships in human behavior. These skills are highly desirable in fields such as health care informatics. Students who are able to complete the courses below with an average GPA in these courses of 3.75 meet the criteria for the certificate and have a level of proficiency in data analytics that employers will highly value.

Courses – 16 hours
PSY 3010 Statistics and Experimental Design
PSY 3110 Experimental Psychology
PSY 4930 Senior Thesis
PSY 4931 Senior Thesis
PSY 4600 Data Analytics in Psychology

Motion to approve. Barry Stein
Second. Lisa Zagumny
Vote. Motion carried.

5. Earth Sciences

A. Curriculum Changes.

1) Geosciences, Geology Concentration, B.S.

Freshman Year
~~GEOL 1020 - Field Experiences in the Geosciences Credit: 1.~~
MSCI 1020 First-Year Connections[1] Credit: 1.
GEOL 1040 - Physical Geology Credit: 4.
GEOL 1045 - Earth Environment, Resources and Society Credit: 4. or GEOG 2100 – Introduction to Meteorology Credit: 4.
ENGL 1010 - English Composition I Credit: 3.

ENGL 1020 - English Composition II Credit: 3.
CHEM 1110 - General Chemistry I Credit: 4.
CHEM 1120 - General Chemistry II Credit: 4.
HIST 2010 - Early United States History Credit: 3.
HIST 2020 - Modern United States History Credit: 3.
MATH[2] Credit: 3-5.
Total: 31-33

Sophomore Year
GEOL 2500 - Geological Fundamentals Credit: 3.
One Required Course from Geology Concentration Credit: 3-4.

PHYS 2010 - Algebra-based Physics I Credit: 4. and
PHYS 2020 - Algebra-based Physics II Credit: 4.
Or
BIOL 1020 - Diversity of Life Credit: 4. and
BIOL 3130 - General Ecology Credit: 4.

MATH 3070 - Statistical Methods I Credit: 3.
Humanities/Fine Arts Electives Credit: 6.
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.
GEOG 4510 (5510) - Theory of GIS I Credit: 3.
Total: 29-30

Junior Year
Social/Behavioral Sciences Electives Credit: 6.
COMM 2025 - Fundamentals of Communication Credit: 3. or PC 2500 – Communicating in the Professions Credit: 3.
Required Courses from Geology Concentration Credit: 11-12.
Directed Electives from Geology Concentration Credit: 7-8.
MATH[3] or Free Elective Credit: 3.
Total: 30-32

Senior Year
GEOL 4930 - Senior Thesis Credit: 3.
GEOL 4931 - Senior Thesis Credit: 3.
GEOG 4210 (5210) – Cartography Credit: 3.
Directed Electives from Geology Concentration Credit: 3-4.
Free Electives Credit: ~~17-22~~ 13-17.
Total: ~~26-32~~ 25-30

Note:

[1]This course not included in 120-hour curriculum.

[2]MATH ~~1130~~ 1710, MATH 1730 or MATH 1910

[3]If MATH ~~1130~~ 1710 was taken, then take MATH 1720; otherwise take a free elective.

Geology Concentration Required Courses, any 4 of the following courses (15-16 hours)
GEOL 2000 - Earth Evolution and Life History Credit: 3.
GEOL 3110 - Principles of Mineralogy and Petrology Credit: 4.
GEOL 3230 - Structural Geology and Tectonics Credit: 4.
GEOL 3830 - Field Geology Credit: 4.
GEOL 4110 - Sedimentation and Stratigraphy Credit: 4.

Geology Concentration Directed Electives, any 3 of the following courses (~~9-12~~ 11-12 hours)
~~GEOG 1100 - Global Climate Change Credit: 3.~~
GEOL 3120 - Mineralogy Credit: 4.
GEOL 3310 – Planetary Geoscience: 3.
~~GEOL 3350 - Paleobiology Credit: 3~~.
~~GEOL 3410 - Paleontology Credit: 4~~.
GEOL 3550 – Paleoclimates: 4.
GEOG/GEOL 4150 (5150) - Geomorphology Credit: 4.
GEOL 4200 - Geological Exploration Techniques Credit: 4.
~~GEOL 4210 - Advanced Historical Geology Credit: 3~~.
GEOL 4610 - Optical Mineralogy and Petrography Credit: 4.
GEOG/GEOL 4711 (5711) - Hydrogeology Credit: 4.

2) Geosciences, Geographic Information Systems Concentration, B.S.
Freshman Year
~~GEOL 1020 - Field Experiences in the Geosciences Credit: 1.~~
MSCI 1020 First-Year Connections[1] Credit: 1.
GEOL 1040 - Physical Geology Credit: 4.
GEOL 1045 - Earth Environment, Resources and Society Credit: 4. or GEOG 2100 – Introduction to Meteorology Credit: 4.
ENGL 1010 - English Composition I Credit: 3.
ENGL 1020 - English Composition II Credit: 3.
CHEM 1010 – Introductory Chemistry I Credit: 4. or CHEM 1110 - General Chemistry I Credit: 4.
CHEM 1020 – Introductory Chemistry II Credit: 4. or CHEM 1120 - General Chemistry II Credit: 4.
HIST 2010 - Early United States History Credit: 3.
HIST 2020 - Modern United States History Credit: 3.
MATH[2] Credit: 3-5.

Total: 31-33

Sophomore Year

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.
MATH 3070 - Statistical Methods I Credit: 3.
Humanities/Fine Arts Electives Credit: 6.
GEOG 4510 (5510) - Theory of GIS I Credit: 3.
GEOL 2500 - Geological Fundamentals Credit: 3.

PHYS 2010 - Algebra-based Physics I Credit: 4. and
PHYS 2020 - Algebra-based Physics II Credit: 4.
Or
BIOL 1020 - Diversity of Life Credit: 4. and
BIOL 3130 - General Ecology Credit: 4.

~~CSC 1300 - Introduction to Problem Solving and Computer Programming Credit: 4. or~~
~~WEBD 1500 - Introduction to Web Design Credit: 3.~~
Free Electives Credit 3-4.
Total: 29-30

Junior Year

Social/Behavioral Sciences Electives Credit: 6.
COMM 2025 - Fundamentals of Communication Credit: 3. or PC 2500 – Communicating in the Professions Credit: 3.
Required Courses from GIS Concentration Credit: 12 ~~15~~.
Directed Electives from GIS Concentration Credit: 6-8.
GEOG 4210 (5210) – Cartography Credit: 3.
Total: ~~30-32~~ 30-32

Senior Year

GEOL 4930 - Senior Thesis Credit: 3.
GEOL 4931 - Senior Thesis Credit: 3.
Directed Electives from GIS Concentration Credit 3-4.
Free Electives Credit ~~12~~ 13-17.
MATH[3] or Free Elective Credit: 3.
Total: ~~25-29~~ 25-30
Note:
[1]This course not included in 120-hour curriculum.
[2]MATH ~~1130~~ 1710, MATH 1730 or MATH 1910
[3]If MATH ~~1130~~ 1710 was taken, then take MATH 1720; otherwise take a free elective.

Geographical Information Systems (GIS) Concentration Required Courses (~~15~~ 12 hours)
~~WEBD 1500 - Introduction to Web Design Credit: 3~~.
CSC 1200: Principles of Computing: 3 or DS 2810: Computer Application in Business: 3 or CITC 1300 Beginning HTML and CSS (TN eCampus): 3.
~~GEOG 4210 (5210) - Cartography Credit: 3.~~
GEOG 4650 (5650) - Environmental Applications of GIS Credit: 3.
GEOG 4850 (5850) - Advanced GIS Credit: 3.
GEOL 4410 (5410) - Remote Sensing Credit: 3.

Geographical Information Systems (GIS) Concentration Directed Electives, any 3 of the following courses (9-~~10~~ 11 hours)
BIOL/WFS 4220 (5220) – Biostatistics Credit: 3.
BIOL/WFS 4610 (5610) – Invertebrate Zoology Credit: 3
~~GEOG 1100 - Global Climate Change Credit: 3~~.
~~GEOG 1035 - World Regional Geography I Credit: 3.~~
~~GEOG 2100 - Introduction to Meteorology Credit: 4.~~
~~GEOG 3010 - Geography of the United States Credit: 3.~~
GEOG/GEOL 3200 - Water Resources Credit: 3.
GEOG/GEOL 4150 (5150) - Geomorphology Credit: 4.
GEOG 4511 (5511) - Theory of GIS II Credit: 3.
GEOG/GEOL 4711 (5711) - Hydrogeology Credit: 4.
~~GEOL 3200 - Water Resources Credit: 3.~~
~~GEOL 4150 (5150) - Geomorphology Credit: 4.~~
~~GEOL 4711 (5711) - Hydrogeology Credit: 4.~~
~~MATH 3080 - Statistical Methods II Credit: 3. or~~
~~PSY 3010 - Statistics and Experimental Design Credit: 3.~~

3) Geosciences, Geography Concentration, B.S.
Freshman Year
~~GEOL 1020 - Field Experiences in the Geosciences Credit: 1.~~
MSCI 1020 First-Year Connections[1] Credit: 1.
GEOL 1040 - Physical Geology Credit: 4.
GEOL 1045 - Earth Environment, Resources and Society Credit: 4. or GEOG 2100 – Introduction to Meteorology Credit: 4.
ENGL 1010 - English Composition I Credit: 3.
ENGL 1020 - English Composition II Credit: 3.
CHEM 1010 – Introductory Chemistry I Credit: 4. or CHEM 1110 - General Chemistry I Credit: 4.
CHEM 1020 – Introductory Chemistry II Credit: 4. or CHEM 1120 - General Chemistry II Credit: 4.
HIST 2010 - Early United States History Credit: 3.
HIST 2020 - Modern United States History Credit: 3.
MATH[2] Credit: 3-5.

Total: 31-33

Sophomore Year

GEOL 2500 - Geological Fundamentals Credit: 3.
~~Two~~ Required Course from Geography Concentration Credit: ~~6-7~~ 3
PHYS 2010 - Algebra-based Physics I Credit: 4. and
PHYS 2020 - Algebra-based Physics II Credit: 4.
Or
BIOL 1020 - Diversity of Life Credit: 4. and
BIOL 3130 - General Ecology Credit: 4.

MATH 3070 - Statistical Methods I Credit: 3.
Humanities/Fine Arts Electives Credit: 6.
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.
GEOG 4510 (5510) - Theory of GIS I Credit: 3.
Total: ~~32-33~~ 29

Junior Year

COMM 2025 - Fundamentals of Communication Credit: 3. or PC 2500 – Communicating in the Professions Credit: 3.
Required Courses from Geography Concentration Credit: ~~9-10~~ 9
Directed Electives from Geography Concentration Credit: 3-4
GEOG 4210 (5210) – Cartography Credit: 3.
MATH[3] or free elective Credit: 3.
Free Electives Credit: ~~6~~ 9
Total: ~~24-26~~ 30-31

Senior Year

GEOG 4930 - Senior Thesis Credit: 3.
GEOG 4931 - Senior Thesis Credit: 3.
Three directive electives from Geography Concentration Credit: ~~10~~ 9-11.
Free Electives Credit: ~~8-14~~ 9-10
Required course from Geography concentration Credit: ~~3-4.~~ 3
Total: ~~28-33~~ 27-30

Note:
[1]This course not included in 120-hour curriculum.
[2]MATH ~~1130~~ 1710, MATH 1730 or MATH 1910
[3]If MATH ~~1130~~ 1710 was taken, then take MATH 1720; otherwise take a free elective.
Geography Concentration Required Courses (12 hours)
GEOG 1012 - Cultural Geography Credit: 3.

GEOG 1130 - Geography of Natural Hazards Credit: 3.
~~GEOG 2100 - Introduction to Meteorology Credit: 4.~~
GEOG/GEOL 3200 - Water Resources Credit: 3.
~~GEOG 4210 (5210) - Cartography Credit: 3.~~
GEOG 4650 (5650) - Environmental Applications of GIS Credit: 3.

Geography Concentration Directed Electives, any ~~four~~ 4 of the following courses (12-~~14~~ 15 hours)
~~GEOG 2010 World Regional Geography (RODP) Credit 3.~~
~~GEOG 1100 - Global Climate Change Credit: 3.~~
~~GEOG 1035 - World Regional Geography I Credit: 3.~~
GEOL 2000 - Earth Evolution and Life History Credit: 3.
~~GEOG 3710 Geography of the U.S. (RODP) Credit 3.~~
GEOL 3550 – Paleoclimates Credit: 4
GEOG/GEOL 4150 (5150) - Geomorphology Credit: 4.
GEOG 4410 (5410) - Remote Sensing Credit: 3.
GEOG 4511 (5511) - Theory of GIS II Credit: 3.
GEOG/GEOL 4711 (5711) - Hydrogeology Credit: 4.
GEOG 4850 (5850) - Advanced GIS Credit: 3.

4) Geosciences, Environmental Geology Concentration, B.S.

Freshman Year

~~GEOL 1020 - Field Experiences in the Geosciences Credit: 1.~~
MSCI 1020 First-Year Connections[1] Credit: 1.
GEOL 1040 - Physical Geology Credit: 4.
GEOL 1045 - Earth Environment, Resources and Society Credit: 4. or GEOG 2100 – Introduction to Meteorology Credit: 4.
ENGL 1010 - English Composition I Credit: 3.
ENGL 1020 - English Composition II Credit: 3.
CHEM 1110 - General Chemistry I Credit: 4.
CHEM 1120 - General Chemistry II Credit: 4.
HIST 2010 - Early United States History Credit: 3.
HIST 2020 - Modern United States History Credit: 3.
MATH[2] Credit: 3-5.
Total: 31-33

Sophomore Year

GEOL 2500 - Geological Fundamentals Credit: 3.
Required Course from Environmental Geology Concentration Credit: 3-4.

PHYS 2010 - Algebra-based Physics I Credit: 4. and
PHYS 2020 - Algebra-based Physics II Credit: 4.
Or
BIOL 1020 - Diversity of Life Credit: 4. and

BIOL 3130 - General Ecology Credit: 4.

MATH 3070 - Statistical Methods I Credit: 3.
Humanities/Fine Arts Electives Credit: 6.
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.
GEOG 4510 (5510) - Theory of GIS I Credit: 3.
Total: 29-30

Junior Year
Social/Behavioral Sciences Electives Credit: 6.
COMM 2025 - Fundamentals of Communication Credit: 3. or PC 2500 – Communicating in the Professions Credit: 3.
GEOG 4210 (5210) – Cartography Credit: 3.
Required Courses from EGEO Concentration Credit: ~~9-12~~ 6-8
Directed Electives from EGEO Concentration: Credit: 6-8.
MATH[3] or Free Elective Credit: 3.
Total: ~~27-32~~ 27-31

Senior Year
GEOL 4930 - Senior Thesis Credit: 3.
GEOL 4931 - Senior Thesis Credit: 3.
Required Courses from EGEO Concentration Credit: 6-8
Directed Electives from EGEO Concentration Credit ~~3-4~~ 6-8
Free Electives Credit: ~~4-15~~ 8-11
~~MATH[3] or Free Elective Credit: 3.~~
Total: ~~25-33~~ 26-33
Note:
[1]This course not included in 120-hour curriculum.
[2]MATH ~~1130~~ 1710, MATH 1730 or MATH 1910
[3]If MATH ~~1130~~ 1710 was taken, then take MATH 1720; otherwise take a free elective.
Required Environmental Geology Concentration Courses, any 5 of the following courses (~~21~~ 17-18 hours)
GEOG/GEOL 3200 - Water Resources Credit: 3.
GEOL 3830 – Field Geology Credit 4
GEOG/GEOL 4150 (5150) - Geomorphology Credit: 4.
~~GEOL 4200 - Geological Exploration Techniques Credit: 4.~~
GEOL 4410 (5410) - Remote Sensing Credit: 3.
GEOG/GEOL 4711 (5711) - Hydrogeology Credit: 4.
GEOG 4650 (5650) - Environmental Applications of GIS Credit: 3.

Environmental Concentration Directed Electives, any ~~three~~ 4 of the following courses, (~~9-11~~ 12-16 hours)
~~AGRN 4220 (5220) - Environmental Soil Chemistry Credit: 3.~~
~~AGRN 4230 (5230) - Soil Classification Credit: 3.~~
~~BIOL 2310 - General Botany Credit: 4.~~
AGRN 2000 Soil and the Environment – Credit: 3 or AGRN 3000 Soils – Credit: 4.
BIOL 4610 (5610) - Invertebrate Zoology Credit: 3.
BIOL/WFS 4840 (5840) - Limnology Credit: 3.
CHEM 3005 Elementary Organic Chemistry – Credit: 4.
CHEM 3410 Quantitative Analysis Credit: 4.
ESS 3000 – Introduction to Environmental Law Credit: 3.
ESS 3710 – Chemistry and the Environment Credit: 3.
GEOL 3550 – Paleoclimates Credit: 4.
GEOL 4300 (5300) – Environmental Aqueous Geochemistry Credit: 3.
~~GEOG 1100 - Global Climate Change Credit: 3.~~
~~GEOG 2100 - Introduction to Meteorology Credit: 4.~~
~~GEOL 2000 - Earth Evolution and Life History Credit: 3.~~
WFS 4500 (5500) - National Wildlife Policy Credit: 3.

Motion to approve. Evan Hart
Second. Linda Null
Vote. Motion carried.

6. **Art, Craft & Design**
   A. **Addition of Art History Minor.**
   The School of Art, Craft & Design proposes the addition of a new Minor in Art History. Students may earn this minor by completing 15 hours (5 courses) from the following courses:

   Required: ART 2000: Art History Survey I, lecture, 3 credit hours.
   ART 2020: Art History Survey II, lecture, 3 credit hours.
   ART 3130: Art Since 1900, lecture, 3 credit hours.

   Six hours (two courses) of the following upper division (3000 and above) Art History course offerings:
   ART 3150: History of Crafts I, lecture, 3 credit hours.
   ART 3160: History of Crafts II, lecture, 3 credit hours.
   ART 4040: Art Criticism and Aesthetic Understanding, lecture, 3 credit hours.
   ART 4100: Art Tour, lecture and study abroad experience, 3 credit hours.
   ART 4170: Ancient Mesoamerican Art, 3 credit hours.

   Justification: The School of Art, Craft & Design currently offers only one minor, Minor of Art, which is studio based. Non-Art majors have expressed interest in pursuing study in Art History; this minor will allow students from across the

university to achieve good understanding of a broad range of Art History knowledge. Additionally, with the new Course Program of Study (CPoS) restrictions, some students may not receive financial aid for these courses unless they are included as a CPoS. By adding the new minor, we are able to serve the educational interests of these students while better ensuring financial aid coverage.

Financial impact: This new minor uses existing courses and no new costs are expected.

Effective date: Fall 2020

Motion to approve. Kim Winkle
Second. Lisa Zagumny
Vote. Motion carried

B. Curriculum and Catalog Changes.

Add the following course to the list of guided electives:
COM1010: Basic Web Design, TN e-campus online 3, Credit. 3. This course presents the principles for planning well-designed web pages and websites. It explores the factors that affect web layout and design such as organization, navigation, usability, accessibility, typography, graphics and color.
https://tnecampus.org/courses/198/syllabus

Motion to approve. Kim Winkle
Second. Lisa Zagumny
Vote. Motion carried

7. Chemistry

A. Course Additions.

Add CHEM 2920 Undergraduate Research Methods II– Lec. 1, Lab 3, Credit 2
Prerequisites: Successful completion of CHEM 2910 with a B or better

CHEM 2920 is designed to apply and utilize the skills obtained in Undergraduate Research Methods (CHEM 2910) in a laboratory setting. Students will work with a faculty mentor on the research project that was assigned to them in CHEM 2910. Work on this project will allow students to build practical research skills that can be transferred to other research projects. Students will also disseminate the findings of their project at Research and Creative Activities Day.

Effective: Spring 2020

Motion to approve. Jeff Boles
Second. Lisa Zagumny
Vote. Motion carried

8. History

A. Course Additions.

HIST 4110-4119/5110-5119 Studies in Appalachian History and Culture
Catalog Description: Selected topics relating to the history and culture of Appalachia. Lec. 3 Credit 3.

Effective: Spring 2020

**Friendly Amendment: Course title to be changed to "Appalachian History and Culture" instead of Studies in Appalachian History and Culture*

Motion to approve. Jeff Roberts
Second. Julie Baker
Vote. Motion carried

9. **Interdisciplinary Studies**

A. Addition of Minor in Leadership.

The School of Interdisciplinary Studies in partnerships with the School of Agriculture, the Department of Communication, the Department of English, and the College of Business propose the creation of a minor in Leadership.

15 hours required:

LIST 3500	Non-Profit Leadership	(3 credits)
LIST 3093	Service Learning	(3 credits)
AGHE 3000	Leadership and Service	(3 credits)
BMGT 4520	Organizational Leadership	(3 credits)
JOUR 3460	Introduction to Public Relations	(3 credits)
COMM 3030	Principles of Event Planning	(3 credits)
AGED 3010	Professional Leadership	(3 credits)
COMM 3080	Communication and Effective Teamwork	(3 credits)
PC 3750	Ethics in the Professions	(3 credits)
PC 4990	Business and Grant Proposal Writing	(3 credits)
LIST 4093	Special Topics in Leadership	(3 credits)
LIST 4920-9	Special Topics if related to Leaderships	(3 credits)
LIST 4440-9	Workshops if related to Leadership	(1 credit)
LIST 4710	Workplace Conflict and Resolution	(3 credits)
or		
BMGT 4410	Conflict Management and Negotiation	(3 credits)

Substitutions are possible but require advisor approval and petition to SoIS.
Effective: Summer 2020

Motion to approve. Mike Gotcher
Second. Dennis Duncan

Vote. Motion carried

B. Addition of Minor in Caregiving.

The School of Interdisciplinary Studies in partnership with School of Human Ecology and Religious Studies proposes the creation of a new minor in Caregiving.

15 hours required: (12 hours must be upper division 3000/4000)

LIST 3600:	Concepts of Caregiving	(3 credits)
LIST 3610:	Home Safety and Equipment Use of Caregiving	(3 credits)
LIST 3620	Substance Abuse and Caregiving	(3 credits)
LIST 4600:	Advanced Caregiving	(3 credits)
RELS: 3600	Religious Perspectives: Aging and End of Life	(3 credits)
HEC 2065:	Families in Society	(3 credits)
HEC 3565:	End of Life Applications for Children and Families	(3 credits)
HEC 3100:	Intercultural Competence	(3 credits)
HEC 4610:	Families/Normative and Catastrophic Issues	(3 credits)

Substitutions are possible but require advisor approval and petition SoIS.

Effective: Summer 2020

Motion to approve. Mike Gotcher
Second. Brenda Wilson
Vote. Motion carried

C. Course Additions.

1) Add LIST 1601/3 – The Freshman Athlete Experience* Lec 1, Lab 0 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 Effective: Spring 2020

2) Add 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.
   Effective: Spring 2020

3) Add LIST 3620 - Substance Abuse and Caregiving* Lec 3, Credit 3
   Course Description: This is an upper division course that examines the concepts of caregiving, both personally and professionally, for persons who have the

disease of addiction. Topics include roles of caregiving, 12 step care, crisis management, personal connection, ethical boundaries, personal boundaries, cultural aspects, insurance, and legal issues. This course will not only explore the traditional theories of caregiving, but will also focus on aiding students in the development of their own personally-centered approaches to caregiving both in their personal and professional environments as well as where and how to set healthy boundaries with persons who are addicted and or alcoholic.

4) Add LIST 4710 – Workplace Conflict and Resolution* Lec 3, Credit 3
Course Description: This is an upper division course that examines the nature of conflict in the workplace and at home. This includes what causes it; what its effects, benefits, and costs are; what can be done to maximize the benefits (engage in constructive conflict); and, to limit the costs (prevent, manage, and resolve destructive conflict). This course will not only explore the traditional theories of people management and conflict resolution, but will also focus on aiding students in the development of their own personally-centered approaches to conflict management and negotiation in their professional environment.
Prerequisites: None

5) Add RELS 3410 Religion and Comics and Graphic Novels Lec 3, Credit 3
Course Description: The purpose of this course is to examine the relationship between comics and graphic novels and religion. Comic books and graphic novels are both arbiters and products of culture, and therefore speak to and reflect, or change, the religious experience and culture of those engaged with them.
Prerequisites: RELS 2010 or permission of instructor

6) Add RELS 3420 Religious Diversity in the Workplace Lec 3, Credit 3
Course Description: The purpose of this course is to examine how to navigate an increasingly religiously diverse society from the perspective of how to engage with co-workers, supervisors, and subordinates in both the American and international workplace. This course will include an overview of a number of modern practices of global religions, a summation of beliefs with a focus on religious difference, and information regarding best practices for preventing microaggressions, conflict, human resources blunders, and religious intolerance.
Prerequisites: RELS 2010 or permission of instructor

7) Add RELS 3600 Religious Perspectives: Aging and End of Life Lec 3, Cr 3
Course Description: The purpose of this course is to examine how different religions approach the eventualities we all face: aging, dying, and death, in order to increase student understanding and deepen religious studies knowledge. This course will focus both on the rituals involved in aging, dying, death and bereavement, and the meaning of these life events in different religious traditions. As a course that also applies for the Caregiving Certificate, it will also

involve an exploration of how various cultures approach the idea of eldercare and life cycles. Prerequisites: RELS 2010 or permission of instructor

8) Add RELS 4310 Women in Religious Traditions Lec 3, Credit 3
Course Description: The purpose of this course is to examine how religious traditions are experienced by female practitioners, how women shape religious traditions, and how the issues of sex, gender, and sexuality influence and are influenced by religious traditions, both within the religions themselves and outside in wider culture and society. Prerequisites: RELS 2010 or permission of instructor

9) **Course Changes.**

From:
LIST 4995: Culminating Project Lec. 3, Credit 3

Description: Academic research or other creative activity resulting in a tangible product to demonstrate synthesis of student's coursework. This course is required for all LIST and PRST majors.
Prerequisite: Permission of instructor.

To:
LIST 4995: Culminating Project Lec. 3, Credit 3
Description: Academic research or other creative activity resulting in a tangible product to demonstrate synthesis of student's coursework. This course is required for all LIST and PRST majors. Students must earn a minimum grade of C to pass the course.
**Friendly amendment: Students must earn a minimum grade of C or better for program completion*

Prerequisite: Senior Status. Permission of instructor.

10) **Course Deletions.**

a) UNIV 3886: Experiential Learning Credit 6
Work or voluntary experience that closely relates to the major, equates with skills knowledge or perspectives currently required in course work and involves analysis or reflection at lower division or upper division undergraduate credit. Portfolio evaluated by faculty team. To apply for this credit, see the following link
www.tntech.edu/ISEE/CreditForLifeExperience.pdf.

b) UNIV 4110 – PRST/LIST Internship Lec 3-6 Credit 3-6
Educational activity within an organization dealing with the type of work the student hopes to do upon graduation. The internship is a learning environment where the student is treated as one of the employees but often does not have the pressures of being a full-time employee.

11) **Curriculum Changes.**

a) Change of terminology in Undergraduate Catalog Program of Study: BS in Interdisciplinary Studies

http://catalog.tntech.edu/preview_program.php?catoid=27&poid=3292&returnto=5583
Replace the term "Concentation Area" with "Emphasis Area". This is the correct term used in the program, and the term that occurs in all current forms.

b) Change grading requirement LIST 4995. Program of Study: Interdisciplinary Studies Major.

From:
[1] Concentration area courses must be upper division (3000, 4000).
[2]Concentration area #1 must be different from concentration area #2
[3]Eighteen hours of the elective hours must be upper division (3000,4000).

A total of 12 hours out of the 120 hours must be at the 4000 level.
No more than 30 hours in business courses can be used toward graduation.
Students must complete at least 50 hours at the university (4-year) level and at least 30 hours at TTU.

To:
[1] Emphasis area courses must be upper division (3000, 4000).
[2]Emphasis area #1 must be different from concentration area #2
[3]Eighteen hours of the elective hours must be upper division (3000,4000).

Students must earn a minimum grade of C to pass LIST 4995

**Friendly amendment: Students must earn a minimum grade of C or better for program completion.*

A total of 12 hours out of the 120 hours must be at the 4000 level.
No more than 30 hours in business courses can be used toward graduation.
Students must complete at least 50 hours at the university (4-year) level and at least 30 hours at TTU.

Motion to approve. Mike Gotcher
Second. Lisa Zagumny
Vote. Motion carried

10. <u>Electrical & Computer Engineering</u>

A. Course changes.

1) From:
ECE 4720 (5720). Telecommunication Systems Design. Lec. 3. Credit 3.

Prerequisite: C or better in ECE 4710 (5710). Link budget, synchronization, frequency synthesis, receiver architecture, noise and distortion, error correction codes, spread-spectrum systems.

To:
ECE 4720 (5720). Telecommunication Systems Design. Lec. 3. Credit 3.
Prerequisite: C or better in ECE 3020, C or better in ECE 3710, and C or better in MATH 3470. Link budget, synchronization, frequency synthesis, receiver architecture, noise and distortion, error correction codes, spread-spectrum systems.

2) **From:**
ECE 2011. Electrical Engineering Lab I. Lab. 3. Credit 1.
Prerequisite: C or better in ECE 2010 (ECE 2010 may be taken concurrently). Introduction to electrical and electronic components, circuits, test equipment, and measurement techniques.

To:
ECE 2011. Electrical Engineering Lab I. Lab. 3. Credit 1.
Prerequisite: C or better in CSC 1300, C or better in MATH 1920, C or better in MATH 2010, C or better in MATH 2120, 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, circuits, test equipment, and measurement techniques.

3) **From:**
ECE 2850. Principles of Electric Currents. Lec. 3. Credit 3.
Prerequisite: C or better in MATH 1920, C or better in MATH 2010, MATH 2120 (MATH 2120 may be taken concurrently). Introduction to electric circuit quantities and components, systematic application of Ohm's and Kirchhoff's laws, superposition, Thevenin and Norton theorems, operational amplifiers, RL and RC transients, Laplace transform methods for electric circuit analysis, steady-state ac-circuit solution, power in ac-circuits, and 3-phase circuits. Will not count for credit for Electrical Engineering or Computer Engineering majors.

To:
ECE 2850. Principles of Electric Circuits. Lec. 3. Credit 3.
Prerequisite: C or better in MATH 1920, C or better in MATH 2010, C or better in MATH 2120 (MATH 2120 may be taken concurrently). Introduction to electric circuit quantities and components, systematic application of Ohm's and Kirchhoff's laws, superposition, Thévenin and Norton theorems, operational amplifiers, RL and RC transients, Laplace transform methods for electric circuit analysis, steady-state ac-circuit solution, power in ac-circuits, and 3-phase circuits. Will not count for credit for Electrical Engineering or Computer Engineering majors.

4) **From:**
ECE 4961. Capstone Design I. Lec. 2. Lab. 4 Credit 3.

Prerequisite: C or better in ECE 3010, C or better in ECE 3020, C or better in ECE 3060, C or better in ECE 3130, C or better in ECE 3300, C or better in ECE 3920, and either C or better in COMM 2025 or C or better in PC 2500. (ECE 3020 may be taken concurrently). The first in a sequence of two capstone design project courses. Student teams will complete an industry client-driven system design project. Teamwork, leadership, project planning and management, specification, budgeting, design review, subsystem development, testing, weekly reporting, documentation, and oral presentation.

To:

ECE 4961. Capstone Design I. Lec. 2. Lab. 4 Credit 3.
Prerequisite: C or better in ECE 3010, C or better in ECE 3020, C or better in ECE 3060, C or better in ECE 3130, C or better in ECE 3300, C or better in ECE 3920, and either C or better in COMM 2025 or C or better in PC 2500. (ECE 3020 and/or ECE 3920 may be taken concurrently). The first in a sequence of two capstone design project courses. Student teams will complete an industry client-driven system design project. Teamwork, leadership, project planning and management, specification, budgeting, design review, subsystem development, testing, weekly reporting, documentation, and oral presentation.

5) **From:**

ECE 4971. Capstone Design II. Lec. 2. Lab. 4 Credit 3.
Prerequisite: ECE 4961. The second in a sequence of two senior capstone design project courses. Student teams will complete an industry client-driven system design project. Teamwork, leadership, project planning and management, specification, budgeting, design review, implementation, testing, weekly reporting, documentation, and oral presentation.

To:

ECE 4971. Capstone Design II. Lec. 2. Lab. 4 Credit 3.
Prerequisite: ECE 4961 and a C or better in ECE 3920. The second in a sequence of two senior capstone design project courses. Student teams will complete an industry client-driven system design project. Teamwork, leadership, project planning and management, specification, budgeting, design review, implementation, testing, weekly reporting, documentation, and oral presentation.

6) **Course Deletions.**
   a. Remove 3 credit hours of EE Breadth Electives from the senior year
   b. Remove 3 credit hours of EE Vehicle Electives from the senior year.

7) **Course Additions.**
   a. Add 6 credit hours of Career Electives to the senior year.
      These Career Electives are the same as for the BSEE without concentration

Motion to approve. Allan MacKenzie
Second. Lisa Zagumny

Vote. Motion carried

11. **<u>Informational Item</u>**
    - **A.** General Education Student Learning Outcomes and Assessments.

No other such matters being presented, the meeting was adjourned at 4:00 p.m.