UNDERGRADUATE CURRICULUM REVISIONS
Effective, Fall 2013

COLLEGE OF AGRICULTURE, NATURAL RESOURCES AND HUMAN SCIENCES

Department of Animal, Rangeland and Wildlife Sciences

Proposal No. ANSC-12-U-1
Convert topics course into new 4308 Statistics for Agriculture.

ANSC 4308. Statistics in Agriculture. 3(3-0)
Basic and practical overview of agricultural experimentation, which includes an understanding of hypothesis testing, sampling, probability, and analysis and interpretation of agricultural research data. Prerequisite: Junior/Senior standing.

Proposal No. ANSC-12-U-2
Modify degree plan for Animal Science
Replace STAT 4301 or* ANSC 3390 (Sr. 1st) with ANSC 4308 Statistics in Agriculture in Animal Science degree plan. Remove Associated* Footnote.

Proposal No. ANSC-12-U-3
Modify degree plan for Animal Science Pre-Vet
Replace STAT 4301 or MATH 2413 or** ANSC 3390 (Sr. 1st) with ANSC 4308 Statistics in Agriculture or MATH 2413 in Animal Science Pre-Vet degree plan. Remove associated*Footnote

Proposal No. RWSC-12-U-3
Modify degree plan for Range Science majors.
Replace Statistics (Jr. 2nd) with ANSC 4308 Statistics in Agriculture in Range Emphasis degree plan.

Proposal No. RWSC-12-U-4
Modify degree plan for Wildlife Science Majors.
Replace STAT 1342 with ANSC 4308 Statistics in Agriculture in Wildlife Emphasis degree plan.

Department of Human Sciences
Proposal No. HSCI-12-U-1
Change course number and prerequisites for HSCI 3321

HSCI 2323. Marriage and Family Relationships 3(3-0)
Analysis of the family unit as a group of interacting members at each stage of the life cycle, cultural and social influences upon the marriage unit and individuals in the family, alternate life styles in modern society and how to deal with them in the community.

Proposal No. HSCI-12-U-2
Modify Bachelor of Sciences in Human Sciences-Human Nutrition.
1. Replace ENGL 2314 (So 1) with HSCI 3370 (Jr 2).
2. Move STAT 1324 to (So 1).

COLLEGE OF ARTS AND SCIENCES

Proposal No. AS-12-U-01
Remove limits on electives in majors and minors in Arts and Sciences, and rephrase the general description of minors in Arts and Sciences.

Department of Art, Communication, and Theatre

Proposal No. COMM-12-U-02
Create new course.
COMM 4399. Senior Project. 3(3-0)
The execution of a successful design or performance project.

Proposal No. COMM-12-U-03
Delete course.
COMM 2309. Editing. 3(3-0)

Proposal No. COMM-12-U-04
Create new course.
COMM 2304. Introduction to Filmmaking. 3(3-0)
Introduction to filmmaking, including directing, acting, cinematography and the film industry.

Proposal No. COMM-12-U-05
Create new course.
COMM 3353. Acting for the Camera. 3(3-0)
Developing concepts of the use of the voice and body in the creation of character for the camera, for film and television.
Proposal No. COMM-12-U-06
Create new course
COMJ 4309. Advanced Advertising. 3(3-0)
Experience with professional-style presentations to national and international clients. Prepares students for the American Advertising Federation’s National Student Advertising Competition. Prerequisite: COMJ 3321.

Proposal No. COMM-12-U-08
Create new course.
COMJ 4324. Advanced Public Relations. 3(3-0)
Crisis management and problem solving through journalism and communications. Theoretical basis for public relations; laws and ethics concerning the profession. Prerequisite: COMJ 4322.

Proposal No. COMM-12-U-09
Create new course.
COMM 23XX ______(2309). Media Design. 3(3-0)
Theory and practice of media design, editing, and layout for print and electronic media. Journalistic ethics and other problems confronting editors and publication designers. Prerequisite: COMM 2311.

Proposal No. THEA-12-U-01
Create new course.
THEA 2310. Introduction to Theatre. 3(3-0)
An introduction to theatre including narrative, directing, acting, design and theatre as a profession.

Proposal No. THEA-12-U-02
Create new course.
THEA 3341. Introduction to Musical Theatre. 3(3-0)
An introduction to the basics of musical theatre, particularly from the perspective of performance. A course designed to prepare students for the summer musicals held in conjunction with the Music Department. Prerequisite: Registration or credit in MUSI 1159.

Proposal No. THEA-12-U-03
Change course number, credit hour, and lecture/lab designation for THEA 1241.
THEA 1341. Makeup for the Stage. 3(2-4)
The theory and practice of stage makeup with emphasis on the latter.

Proposal No. THEA-12-U-04
Create new course.
THEA 4399. Senior Project. 3(3-0)
The execution of a successful design or performance project.
**Department of Biological and Health Sciences**

*Proposal No. BIOL-12-U-1*
Modify the minor in Biology

**Biology:** 20 semester hours, including BIOL 1306/Biol 1106, BIOL1307/Biol 1107, and three advanced BIOL courses, one of which must be BIOL 3301 or BIOL 3402. If the student’s major requires BIOL 2401 and BIOL 2402, they may be substituted for BIOL 1306/Biol 1106, BIOL1307/Biol 1107.

**Department of Chemistry**

*Proposal No. CHEM-12-U-01*
Separate the combined description of CHEM 3331-3332 into two separate descriptions with title changes.

**CHEM 3331. Physical Chemistry I.**  
3(3-0)
Study of physical and chemical phenomena. Thermodynamics, including thermodynamics laws, thermal chemistry, phase transitions, electrochemistry and chemical equilibrium. Prerequisites: one semester each of Physics and calculus.

**CHEM 3332. Physical Chemistry II.**  
3(3-0)
Study of physical and chemical phenomena. Chemical kinetics, quantum mechanics, spectroscopy, statistical thermodynamics and molecules in motion. Prerequisites: two semester each of Physics and calculus.

*Proposal No. CHEM-12-U-02*
Modify degree plan for Bachelor of Science in Chemistry.
1. Replace “CHEM 4342” (Jr 2) by “Elective, Adv.*” (Sr 2).
2. Replace “ENGL 2342 or ENGL 2362” (Sr 2) by “^Literature/philosophy” (Sr 2).
3. Replace “CHEM, Adv.*” (Jr 2 and Sr 2) with “CHEM 4421” and CHEM 4401 respectively; and drop the related footnote.
4. Change two stars (**) in “Elective, Adv.**” and the corresponding foot notes to one star (*).

*Proposal No. CHEM-12-U-03*
Add a new track to the B.S. in Chemistry: Emphasis in Biochemistry.
1. Add BIOL 1106 (Fr 1)
2. Drop M 1348(Fr 1); move MATH 2413(Fr 2 to Fr 1) and MATH 2414 (So 1 to Fr 2); add BIOL 1307/BIOl 1107 (So 1).
3. Drop ENGL 2314 (So 2); move HIST 1301(Jr 1 to So 2) and 1302 (Jr 2 to 1).
4. Drop Adv. CHEM (Jr 2) and Minor (Jr 2); add BIOL 2421(Jr 2) and STAT 4301(Jr 2).
5. Drop Adv. Minor (Sr 1); add BIOL 3402 (Sr 1)
6. Change Adv. Minor (Sr 2) to Adv. BIOL (Sr 2)
7. Replace the Adv. CHEM (Sr 2) by CHEM 4401. Remove the footnote “*Advanced CHEM is CHEM 4401 and CHEM 4421. These courses may be taken in either order.*”
8. Change ENGL 2342 or ENGL2362 to Literature/philosophy
9. Change two stars (**) in “Elective, Adv.**” and the corresponding footnotes to one star (*).

Proposal No. CHEM-12-U-04

Add a new track to the B.S. in Chemistry: Emphasis in Pre-health.
1. Add BIOL 1106 (Fr 1)
2. Drop MATH 2414 (So 1); Add BIOL 1307/Biol 1107
3. Replace PHYS 2325/PHYS 2125 (So 1) by PHYS 1301/PHYS 1101, and PHYS 2326 /
   PHYS 2126 (So 2) by PHYS 1302/PHYS 1102
4. Drop ENGL 2314 (So 2); move HIST 1301(Jr 1 to So 2) and HIST 1302 (Jr 2 to Jr 1)); Add
   STAT 4310 (Jr 2)
5. Replace Minor (Jr 2) by BIOL 2421
6. Replace “CHEM, Adv.* (Jr 2)” by “CHEM 4421”
7. Drop CHEM 3332 (Jr 2),
8. Drop CHEM 4311 and CHEM 4381 (Sr 1)
9. Replace Adv. Minor (Sr 1) by BIOL 3402 (Sr 1)
10. Add Adv. Elective *(Sr 1)
11. Drop CHEM 4132 (Sr 2)
12. Change ENGL 2342 or ENGL 2362 to Literature/philosophy
13. Replace “CHEM, Adv.* (Sr 2)” by “CHEM 4401”
14. Remove footnote: *Advanced CHEM is CHEM 4401 and CHEM 4421. These courses may be taken in either order.
15. Change two stars (**) in “Elective, Adv.**” and the corresponding footnotes to one star (*).
16. Change Adv. Minor (Sr 2) to Adv. BIOL.

Department of History

Proposal No. HIST-12-U-1

Modify History Minor

History: The minimum requirement shall be 18 semester hours, consisting of HIST 1302, HIST 2321-2322 and 9 hours of advanced electives. (2012-2014 catalog p. 119). A minor in History requires completion of 18 semester hours in History consisting of three required courses (HIST 1302, HIST 2321 and HIST 2322) and three advanced elective courses.

Proposal No. HIST-12-U-2

New Course.

HIST 4305. History Internship 3(3-0)

Allows students to gain practical experience in an area of public history while earning course credit. Prerequisite: 6 semester hours of History.
Proposal No. HIST-12-U-3
New Course.
HIST 4313. Early Modern Europe. 3(3-0)
Study of themes in European history focusing on the Renaissance and Reformation and religious change; expansion of state power and resistance; new scientific understandings; changing economic and gender roles; the development of Enlightenment ideas. Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. HIST-12-U-4
Revise course title and description.
HIST 4316. Nineteenth-Century Europe. 3(3-0)
European industrialization and imperial expansion; rise of nationalism as well as ideologies of resistance; gender and class relations in an industrializing society; development of institutions of control and liberation in the long nineteenth century. Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. HIST-12-U-5
New Course.
HIST 4317. French Revolution and Napoleon. 3(3-0)
Study of the actors and events of the French Revolution and its impact upon European history concluding with analysis of the role and significance of Napoleon and the Napoleonic Wars. Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. HIST-12-U-6
Delete course
HIST 3324. History of Technology and Society 3(3-0)

Proposal No. HIST-12-U-7
New Course.
HIST 4365. Comparative Genocide. 3(3-0)
Investigation of the history of the Holocaust and of other world genocides in a comparative context. Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. HIST-12-U-8
New Course.
HIST 4394. Crucial Topics in World History. 3(3-0)
Seminar on specialized topics in World History culminating in the production of a significant research paper. May be repeated for credit as the topic changes. Prerequisite: 12 semester hours of History and/or Political Science.
Proposal No. HIST-12-U-9
Change course description
HIST 4360. Women in History. 3(3-0)
Investigation of women’s historical place in global themes such as patriarchy, sexual politics, work, religion, peace, colonization and the body. (Credit may not be obtained in both HIST 4360 and WGST 4360.) Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. HIST-12-U-10
Revise course title and description.
HIST 4318. Twentieth-Century Europe. 3(3-0)
Political, social and cultural developments in Europe from the Belle Epoque through the end of the Cold War. Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. PHIL-12-U-01
Change course prerequisites.
PHIL 3346. Symbolic Logic. 3(3-0)
Surveys propositional and quantificational logic. Topics include translations between formal languages and English, logical consequence, formal methods of proof and elements of metatheory. Prerequisite: 3 semester hours of PHIL or MATH or consent of instructor.

Proposal No. GEOL-12-U-4
Create new course.
GEOL 4311. Field Course I. 3(0-12)
Geologic field methods and techniques. Includes the use and maintenance of field equipment; measurement, description, and interpretation of stratigraphic sections; identification and interpretation of field relationships of sedimentary rocks; preparation of geological field reports. Typically scheduled in Spring Intersession with daylong activities daily; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3407, GEOL 3411, and GEOL 3481 recommended.

Proposal No. GEOL-12-U-5
Create new course.
GEOL 4312. Field Course II. 3(0-12)
Geologic field methods and techniques. Includes the use and maintenance of field equipment; identification and interpretation of field relationships of igneous and metamorphic rocks; preparation of geological field reports. Typically scheduled in Summer Intersession with daylong activities daily; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3407, GEOL 3411, and GEOL 3481 recommended.

Proposal No. GEOL-12-U-6
Create new course.
GEOL 4213. Field Course III.
Geologic field methods and techniques. Becoming familiar with local geologic employment situations through intern-type experiences. Typically scheduled in Winter Intersession with daylong activities daily; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3407, GEOL 3411, and GEOL 3481 recommended.

Proposal No. GEOL-12-U-7
Change field course requirement in BS in Geology.
1. Replace GEOL 4417, 4; GEOL 4418, 4 (both in Summer); with GEOL 4311*, 3 (Jr. 2nd) [4311, Field Course I, Proposal GEOL-12-U-4], GEOL 4313*, 3 (Sr. 1st) [4312, Field Course II, Proposal GEOL-12-U-5], GEOL 42XX*, 2 (Sr. 2nd) [4213, Field Course III, Proposal GEOL-12-U-6], and add footnote "*Usually offered in Intersession".
2. Move Minor, 3 (Jr. 1st to So. 2nd), +Minor, 3 (Jr. 2nd to Jr. 1st).
3. In So. 2nd, correct error of "13-14" for total hours; there is no flexibility in shown hours. Update hours in terms So. 2nd, Sr. 1st, and Sr. 2nd.

Department of Language and Literature

Proposal No. ENGL-12-U-03
Modify catalog presentation of Writing minor, add courses which are new to the inventory to the Writing Minor description; modify suggested numbers of hours taken in various categories to better reflect courses taught and staffing available.

(p. 123)
Writing: For limitations and requirements for this minor, see the Department of Language and Literature section of the catalog for details.

(p. 155)
Writing minor:
A writing minor consists of 18 semester hours of writing courses, 12 of which must be advanced. These must include 3 hours from ENGL 4310 or ENGL 4311; 9-12 hours from ENGL 2314, ENGL 2374, ENGL 3300, and ENGL 3340; and 3-6 hours from ENGL 4376, Social Class and Language, ENGL-12-U-10], ENGL 4370 (with writing topic) and ENGL 4390. New courses created from the listed Topics courses shall also be options. English majors may not count any course toward both major and minor requirements. Note: With approval of the Language and Literature Chair, 3 semester hours may be from 3000 or 4000 level writing courses offered in departments outside Language and Literature. Consult with Language and Literature Chair for course selection.

Proposal No. ENGL-12-U-06
Modify degree plan for Bachelor of Arts in English.
Change a footnote in degree plan.

To be chosen from any advanced PHIL course, or RELG 1301/RELG 3339.
Proposal No. ENGL-12-U-7
Create new course.

ENGL 4340. Special Topics in British Literature. 3(3-0)
Selected topics in literature from the British Isles or colonies. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topic. Prerequisite: 6 semester hours of sophomore English. Credit may not be obtained in both ENGL 4340, when topic is taught from a women’s studies perspective and WGST 4370.

[Banner title: Topics in British Literature]

[Please add the course with these topics:
  British Women Writers
  Victorian Governesses and Class Struggle
  British Drama (missing syllabus)]

Proposal No. ENGL-12-U-8
Convert topic to new course.

ENGL 4360. Special Topics in American Literature. 3(3-0)
Selected topics in literature from the United States. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topics, but no more than 6 SCH may count toward major or minor requirements. Prerequisite: 6 semester hours of sophomore English. Credit may not be obtained in both ENGL 4360, when topic is taught from a women’s studies perspective and WGST 4370.

[Title for Banner: Topics in American Literature]

[please create this course with the following topics:
  American Gothic (missing syllabus)
  Ethnic American Literature (missing syllabus)
  Nineteenth-Century American Women Writers
  American Drama (missing syllabus)]

Proposal No. ENGL-12-U-9
Convert Topic to new course.

ENGL 4380. Special Topics in World Literature. 3(3-0)
Selected topics in world literature written in English or in English translation. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topics, but no more than 6 SCH may count toward major or minor requirements. Prerequisite: 6 semester hours of sophomore English. Credit may not be obtained in both ENGL 4380, when topic is taught from a women’s studies perspective, and WGST 4370.

[Title for Banner: Topics in World Literature]

[Please create the following topics:]
Proposal No. ENGL-12-U-10
Convert Topic to new course.

ENGL 4376. Social Class and Language 3(3-0)
How social class, race, and/or gender affect English language usage are placed under intense investigation. Home languages of students are compared with linguistic requirements of formal education systems. Prerequisite: 6 semester hours of sophomore English.

Proposal No. ENGL-12-U-11
Revise BA in English
1. Change "***SPAN, adv." alternative (Sr. 1st) to "**SPAN, adv."; convert existing ** and *** footnotes into a single footnote "***Spanish heritage track students must select one foreign language elective."
2. Revise "ENGL 2342 or ENGL 2362" (So. 1st and 2d) to "ENGL 2342" (1st) and "ENGL 2362" (2d).
3. Revise "§British Middle Ages, Renaissance or Restoration" (Jr. 1st and § footnote) to "§Early British".
4. Revise "§§British 19th and 20th Centuries" (Jr. 2nd and §§ footnote) to "§§Later British" (Jr. 2d) and "§§Later British: 19th Century and later" (footnote).
5. Replace "ENGL 4384" with "ENGL 4340" in §§ footnote listing 'Later British' courses'.
6. Replace "ENGL 4370" and "ENGL 4384 (with American topic)" with "ENGL 4360" in §§§ footnote listing American literature courses.

Proposal No. SPAN-12-U-01
Modify degree plan in Bachelor of Arts in Spanish.
Change a footnote in degree plan.

To be chosen from any advanced PHIL course, or RELG 1301/RELG 3339.

Department of Mathematics

Proposal No. MATH-12-U-04
Create new course.

MATH 4351. Mathematical Theory of Games. 3(3-0)
Introduction to game theory. Topics include: combinatorial and strategic games, backward induction, payoffs, cooperative and non-cooperative games, mixed strategies, equilibria, repeated
games and finite automata, common knowledge and incomplete information, the prisoner’s
dilemma. Selected applications to economics, biology, computer science, and political science.
Prerequisite: MATH 3340 or consent of instructor.

**Proposal No. MATH-12-U-05**
Change course description.

**MATH 2413. Calculus I.** 4(3-0-2)
Limits and continuity. Definition of the derivative of a function and techniques of differentiation. Derivatives of various functions, to include rational, exponential, logarithmic, trigonometric and their inverses. Maximizing or minimizing a function, curve sketching, and rate of change problems; L’Hospital’s rule. Introduction to integration, the Fundamental Theorem of Calculus, applications to areas; introduction to numerical integration. Prerequisite: MATH 1348.

**Proposal No. MATH-12-U-06**
Change course description.

**MATH 2414. Calculus II.** 4(3-0-2)
Continuation of MATH 2413. Integration of logarithmic, exponential, and trigonometric functions. Techniques of integration. Applications of the integral to problems involving volumes, work, arc length, and fluid pressure. Infinite sequences and series, power series expansion of function. Calculus with parametric curves, and polar coordinates. Prerequisite: MATH 2413.

**Proposal No. MATH-12-U-07**
Change course description.

**MATH 3415. Calculus III.** 4(3-0-2)
Continuation of MATH 2414. Vector operations in 2 and 3 dimensions, lines, planes; vector-functions, space curves, partial derivatives, curvature; multivariable calculus, optimization, Lagrange multipliers; multiple integrals; vector fields, theorems of Green, Gauss and Stokes. Prerequisite: MATH 2414.

**Department of Music**

**Proposal No. MUSI-12-U-1**
Change lab hour listings

**MUSI 1116. Introduction to Basic Aural Training. (MUSI 116)** 1(0-3)
Introduction to aural skills fundamentals including emphasis on melodic, harmonic dictation and sight-singing of music of various ethnic origins and historical style periods.

**Proposal No. MUSI-12-U-2**
Change lab hour listings

**MUSI 1117. Basic Aural Training. (MUSI 117)** 1(0-3)
Emphasis on dictation and sight-singing of music of various ethnic origins and historical periods. Prerequisite: MUSI 1116 with a grade of C or better, or a satisfactory score on the departmental Placement Exam (Music Theory).

**Proposal No. MUSI-12-U-3**
Change lab hours and lecture hours

**MUSI 1301. Materials of Music. (MUSI 1301)** 3(3-0)

Fundamentals of music with emphasis on developing basic music reading skills on simple melody and/or keyboard instruments. May not apply toward music major or minor.

**Proposal No. MUSI-12-U-4**
Change lab hours

**MUSI 2116-2117. Intermediate Aural Training. (MUSI 2116, MUSI 2117)** 2(0-3)

Continuation of MUSI 1117

**Proposal No. MUSI-12-U-5**
Change lab and lecture hours

**MUSI 4373. Piano Pedagogy IV.** 3(3-0)

Examination and evaluation of mid-level, advanced and adult piano methods. Supervised piano teaching of students at all levels and group piano. Prerequisite: MUSI 4371.

**Proposal No. MUSI-12-U-7**
Change lab hours

**MUSI 3130. Jazz Combo.** 1(0-3)

Jazz music in the small ensemble setting. Experience in improvisation by arranging, rehearsing and performing jazz music as a combo. Prerequisite: audition.

**Proposal No. MUSI-12-U-8**
Change lab hours and move course listing under the Class Instruction heading

**MUSI 1195. Instruments for Elementary Music.** 1(0-2)

Study of instruments used in the elementary music classroom including various recorders, the Orff instrumentarium (xylophone, metallophone, glockenspiel) and fram drum.

**CHANGES:**

1. Correct the lab hours meeting times from 3 to 2.
2. Move the listing for MUSI 1195 from Music Education heading on p. 176 to Class Instruction heading on p. 178. MUSI 1195 should be listed immediately below MUSI 1189. String Class.

**Department of Physics and Geosciences**
Proposal No. PHYS-12-U-4
Reinstate requirements for Physics minor.

PHYS 3343 is required, plus additional PHYS (which may include any prerequisites) to total at least 18 semester hours; at least 3 of the additional hours must be advanced. Prospective PHYS minors should consult with their adviser and the physics faculty to identify courses that will meet their needs.

Proposal No. PHYS-12-U-5
Change course description.
**PHYS 1301. College Physics I.** (PHYS 1304 or PHYS 1401) 3(3-0)
A trigonometry-based introduction to physics. Topics include kinematics, vector analysis, force dynamics, equilibrium, work, energy, momentum, collisions, fluid dynamics and thermal physics. Prior knowledge of physics (one year of high school physics; otherwise PHYS 1373 is recommended) is assumed. Prerequisites: MATH 1314 and MATH 1316. Concurrent enrollment in PHYS 1101 is recommended.

Proposal No. PHYS-12-U-6
Delete course
**PHYS 1170. Principles of Nuclear Engineering.**

Proposal No. PHYS-12-U-7
Drop lab component from PHYS 4460, changing course number; increase prerequisite and revise description to math TPC.
**PHYS 4360. Nuclear Physics** 3(3-0)
A study of nuclear phenomena and properties including mass, stability, magnetic moment, radioactive decay processes and nuclear reactions. The application of nuclear principles to other fields such as astronomy, engineering, manufacturing and medicine. Prerequisites: PHYS 3343; credit or registration in both PHYS 4353 and either MATH 3320 or MATH 3415.

Proposal No. PHYS-12-U-8
Increase hours and credit for PHYS 3110; reword title, description, and prerequisite to agree with Texas Physics Consortium.
**PHYS 3310. Advanced Physics Laboratory.** 3(1-4)
A laboratory course focusing on advanced techniques and experiments drawn from the full range of physics classes. The student will understand the role of experimental design, advanced data analysis and reduction and the use of computers while investigating physical phenomena. Prerequisite: credit or registration in PHYS 3343.

Proposal No. PHYS-12-U-9
Change course description.
**PHYS 3323. Electromagnetic Field Theory.** 3(3-0)
Electrostatics; Laplace’s Equation; the theory of dielectrics; magnetostatics; electromagnetic induction; magnetic fields of currents; Maxwell’s equations. Prerequisites: PHYS 2326/PHYS 2126; credit or registration in MATH 3320 or MATH 3415 or equivalent.

Proposal No. PHYS-12-U-10
Change course title and prerequisites.

PHYS 3313. Mechanics I. 3(3-0)
A mathematical treatment of the fundamentals of classical mechanics. Topics include particle dynamics in one, two and three dimensions; conservation laws; dynamics of a system of particles; motion of rigid bodies; central force problems; accelerating coordinate systems; gravitation; Lagrange’s equations and Hamilton’s equations. Prerequisites: PHYS 2326/PHYS 2126; credit or registration in either MATH 3320 or MATH 3415.

Proposal No. PHYS-12-U-11
Change course title, description and prerequisites.

PHYS 4303. Mathematical Methods for Physicists and Engineers. 3(3-0)
Mathematical techniques from the following areas: infinite series, integral transforming, applications of complex variables; vectors, matrices and tensors, special functions, partial differential equations, Green’s functions, perturbation theory, integral equations, calculus of variations and groups and group representations. Prerequisite: credit or registration in MATH 3320.

Proposal No. PHYS-12-U-12
Change course description.

PHYS 3333. Thermodynamics. 3(3-0)
Equations of state, ideal gases, first and second laws of thermodynamics, entropy and statistical methods. Prerequisites: PHYS 2326 and PHYS 2126; credit or registration in MATH 3415 or equivalent.

Proposal No. PHYS-12-U-13
Change course description and prerequisites.

PHYS 3343. Modern Physics I. 3(3-0)
An introduction to special relativity and elementary quantum mechanics. Topics include space-time, relativistic energy and momentum, the uncertainty principle, Schrödinger’s equation, observables and operators, bound states, potential barriers and the hydrogen atom. Prerequisites: PHYS 2326 and PHYS 2126; credit or registration in either MATH 3320 or MATH 3415 or equivalent.

Proposal No. PHYS-12-U-14
Change course title, description and prerequisites.

PHYS 4191. Physics Research Projects. 1(1-0)
Literature survey and preparation for, and initiation of, a research project agreed to between the student and a faculty advisor, to be completed and reported on in the Research Seminar course. Prerequisite: PHYS 3343.

Proposal No. PHYS-12-U-15
Change title and hours and revise description and prerequisites of PHYS 4391 to agree with Texas Physics Consortium.

PHYS 4192. Physics Research Seminar 1(1-0)
An experimental or theoretical project, begun in the Research Project course, will be concluded by the student and the results reported in a seminar. Students who have not yet taken the ETC major field test in physics are required to do so while enrolled in Seminar. Prerequisite: PHYS 4191.

Proposal No. PHYS-12-U-16
Change course title, description and prerequisites.

PHYS 4353. Quantum Physics. 3(3-0)
The Schrödinger equation; one dimensional systems; the Heisenberg uncertainty principle; magnetic moments and angular momentum; two and three dimensional systems; approximation methods; scattering theory. Prerequisites: PHYS 3343; credit or registration in either MATH 3320 or MATH 3415 or equivalent.

PENDING Proposal No. PHYS-12-U-17
Modify Bachelor of Science in Physics degree.

1. Change PHYS 3110, 1 (Jr 2) to PHYS 33XX [3310, Adv. Lab], 3.
2. Change PHYS 4391*, 3 (Sr 2) to PHYS 41XX [4192, Research Seminar], 1, and drop related footnote.
3. Specify PHYS, adv. (Jr 2) as PHYS 4303 (Jr 1).
4. Replace Elective, adv. (Sr 2) with PHYS 43XX [4360, Nuclear Physics]
5. Drop + marker on PHYS, adv., twice (Sr 1 and Sr 2).
6. Replace Elective (Sr 1) with CSEN 2304 (So 2)
7. Modify + footnote: drop phrases about substituting lower-division for adv.
8. Move PHYS 3323 (Jr 1 to Jr 2); PHYS 4353 (Sr 2 to Sr 1); Minor+ (Jr 1 to Sr 1); Minor, adv.+ (Sr 1 to Sr 2); ^Global learning (So 2 to Jr 1).

Proposal No. PHYS-12-U-18
New course

PHYS 4160. Nuclear Physics Laboratory. 1(0-4)
Laboratory study of natural and artificial radioactivity, and particle physics. Particle physics detectors, such as Geiger-Müller, sodium-iodide, plastic scintillation and solid state detectors. Detector resolution, radioactive half-life, muon lifetime, energy of particles and gamma rays and coincidence measurements. Prerequisite: credit or registration in PHYS 4360.
Proposal No. PHYS-12-U-19
Change course description.

PHYS 2325. University Physics I. (PHYS 2325 or PHYS 2425) 3(3-0)
A calculus-based introduction to physics. Topics include kinematics, vector analysis, force
dynamics, equilibrium, work, energy, momentum, collisions, fluid dynamics and thermal
physics. Prior knowledge of physics (one year of high school physics; otherwise PHYS 1373 is
recommended) is assumed. Prerequisite: credit or registration in MATH 2413 or equivalent.
Concurrent enrollment in PHYS 2125 is recommended.

Proposal No. PHYS-12-U-20
Delete course.

PHYS 3362. Introduction to Nuclear Engineering.

Proposal No. PHYS-12-U-21
Delete course.

PHYS 4362. Radiological Safety.

Proposal No. PHYS-12-U-22
Delete course.

PHYS 4363. Environmental Nuclear Engineering.

Proposal No. PHYS-12-U-23
Delete course.

PHYS 4364. Radiation Protection Engineering.

Proposal No. PHYS-12-U-24
Delete course.

PHYS 4366. Nuclear Reactor Theory.

Proposal No. PHYS-12-U-25
Delete course.

PHYS 4367. Nuclear Reactor Analysis.

Proposal No. WGST-12-U-2
Change course description

WGST 4360. Women in History. 3(3-0)
Investigation of women’s historical place in global themes such as patriarchy, sexual politics, work, religion, peace, colonization and the body. Credit may not be obtained in both HIST 4360 and WGST 4360. Prerequisite: 12 semester hours of History and/or Political Science.

Proposal No. SCWK-12-U-1
Modify the Bachelor of Social Work degree program.
Implement SCWK course changes from other proposals:
1. Change SCWK 2333 (So 2nd) to SCWK 3325 (Jr 1).
2. Move SCWK 3335, Jr 1st to Jr 2nd.
3. Drop SCWK 3337, Jr 1st.
4. Change SCWK 4324 (Jr 2nd) to SCWK 3331 (Jr 1).
5. Drop SCWK 3345, Sr 1st.
6. Change SCWK 4326 (Sr 2nd) to SCWK 3341 (Jr 2nd).
7. Change SCWK 4345 (Sr 2nd) to SCWK 3329 (Jr 1st).
8. Add SCWK 3339, Jr 2nd.
9. Change SCWK 4347 (Sr 2nd) to SCWK 3333 (Jr 1st).
10. Add SCWK 3343, Jr 2nd.
11. Add †SCWK 4331 (Sr 2nd) and related footnote: †This course includes the B.S.W. degree program exit examination.

Change Arts & Sciences courses to SCWK choices:
12. Replace PSYC 2308 (So 2nd), SWBS 2302 (Jr 1st), PSYC 4325 (Jr 2nd), and SOCI 4307 (Sr 1st) with four instances of SCWK, adv.* (three in Sr 1st, one in Sr 2nd), and add footnote: *SCWK 4306, SCWK 4311, SCWK 4313, SCWK 4315, SCWK 4317, or SCWK 4319.

Other changes:
13. Change Kinesiology (Fr 1st and So 1st) to 2 hours of elective (So 2nd).
14. Change Lab science* (So 1st and So 2nd) to BIOL 2401 (So 1st) and BIOL 2402 (So 2nd), and drop the related footnote.
15. Change ENGL 2342 (So 1st) and ENGL 2362 (So 2nd) to ENGL 2342 or ENGL 2362 (So 1st).
16. Change Elective, adv. (Jr 2nd and Sr 1st) to Elective (Fr 1st and So 1st); move one Elective, Jr 2nd to So 2nd, where it combines with the elective hours from item 13 above.
17. Move ^Global learning, Jr 1st to So 2nd.

Proposal No. SCWK 12-U-2
Create a social work minor
The Social Work Minor [added after the Retention in the Program paragraph]
An academic minor is offered in social work. In Texas and other states, applicants for social work licensure are required to have a CSWE accredited B.S.W. or M.S.W. degree; an academic minor in social work is insufficient for licensure in social work. Students who desire an academic minor in social work are required to complete 18 semester credit hours in social work including:

SCWK 2331 The Social Work Profession I
SCWK 33XX [requested SCWK 3325] Human Behavior in the Social Environment I
SCWK 33XX [requested SCWK 3329] Social Welfare: Policy and Advocacy I
SCWK 3335 Human Behavior in the Social Environment II

and six hours from the following

SCWK 4306 Selected Topics in Social Work
SCWK 43XX [requested SCWK 4311] Principles of Youth and Family Social Work
SCWK 43XX [requested SCWK 4313] Principles of Mental Health Social Work
SCWK 43XX [requested SCWK 4315] Principles of Health Social Work
SCWK 43XX [requested SCWK 4317] Principles of Forensic Social Work
SCWK 43XX [requested SCWK 4319] Principles of Geriatric Social Work

Proposal No. SCWK-12-U-3
Change course title and delete prerequisites.
SCWK 2331. The Social Work Profession I. 3(3-0)
Survey of the social work profession, including history, philosophy, ethics and relevance to current social issues. Participation with service agencies to assess interest in pursuing social work as a career.

Proposal No. SCWK-12-U-4
Change course number, description, prerequisites, and adjust the course title for SCWK 2333.
SCWK 3325. Human Behavior in the Social Environment I. 3(3-0)
A multidimensional approach to examining the behavior of individuals, families, groups, organizations, communities, and society as a whole. Theories and research of human behavior across system levels are critically evaluated as applications are made to social work practice. Prerequisite: SCWK 2331.

Proposal No. SCWK-12-U-5
Change course description, delete co-requisite, add prerequisite, and course title.
SCWK 3335. Human Behavior in the Social Environment II. 3(3-0)
Includes the study of individuals as they biologically, psychologically, socially, culturally, and spiritually develop over the human life course within their environment. Theories and research of human development within environmental context are critically evaluated as applications are made to social work practice. Prerequisite: SCWK 3325.

Proposal No. SCWK-12-U-6
Delete course.
SCWK 3337 Theories and Models of Social Work Practice.

Proposal No. SCWK-12-U-7
Change prerequisites and course description.
SCWK 4306. Selected Topics in Social Work. 3(3-0)
Literature and research in areas of social work not otherwise treated in depth in available courses. May be repeated once as topics change. Prerequisite: SCWK 2331.

Proposal No. SCWK-12-U-8
Change course number, title, description, and prerequisites for SCWK 4324.

SCWK 3331. Social Work Practice I. 3(3-0)
Social work practice from a generalist perspective with emphasis on the acquisition of values, knowledge, and skills necessary for working with clients at the micro and mezzo system levels of practice. Prerequisites: SCWK 2331 and admission to the B.S.W. degree program.

Proposal No. SCWK-12-U-9
Delete course.

SCWK 4325. Social Work Methods II.

Proposal No. SCWK-12-U-10
Change course number, title, description, and prerequisites for SCWK 4326.

SCWK 3341. Social Work Practice II. 3(3-0)
Social work practice from a generalist perspective with emphasis on the acquisition of values, knowledge, and skills necessary for working with clients at the mezzo and macro system levels of practice. Prerequisite: SCWK 3331 and admission to the B.S.W. degree program.

Proposal No. SCWK-12-U-11
Change course number, title, description, and prerequisites for SCWK 4345.

SCWK 3329. Social Welfare: Policy and Advocacy I. 3(3-0)
Historical and current survey of the social service delivery system as a response to human need. History, mission and philosophy of social welfare. Prerequisite: SCWK 2331.

Proposal No. SCWK-12-U-12
Create new course

3339. Social Welfare: Policy and Advocacy II. 3(3-0)
Critical analysis of the legislative process, policy analysis, and policy implementation in social work practice with an emphasis on client advocacy. Prerequisites: SCWK 3329 and admission to the B.S.W. degree program.

Proposal No. SCWK-12-U-13
Change course number, title, description, and add prerequisites for SCWK 4347.

SCWK 3333. Social Work Research and Evaluation I. 3(3-0)
Principles and methods of evidence-based practice and research design in social work. Emphasis is placed on the use of research findings to improve practice, policy, and social service delivery. Prerequisites: SCWK 2331, admission to the B.S.W. degree program, and credit or registration in PSYC 3381 or SOCI 3381.
Proposal No. SCWK-12-U-14
Create new course

**3343 Social Work Research and Evaluation II.**  
Principles and methods of measurement and program evaluation in social work. Emphasis is placed on measurement in program and practice evaluation to improve practice, policy, and social service delivery. Prerequisites: SCWK 3333 Social Work Research and Evaluation I and admission to the B.S.W. degree program.

Proposal No. SCWK-12-U-15
Change course title, description, and add prerequisites.

**SCWK 4641. Social Work Practicum I.**  
First in a sequence of two field practicums. Educationally directed and professionally supervised direct service activities providing practical experience in the application of social work values, knowledge, and skills acquired in social work foundation courses. Two hundred (200) clock hours of field placement and a weekly seminar of two hours. Prerequisites: SCWK 3335 [HBSE II], SCWK 3339 Social Welfare: Policy and Advocacy II, SCWK 3341 Social Work Practice II, SCWK 3343 Social Work Research and Evaluation II, good standing in the B.S.W. degree program, and permission of the Social Work Program Director and Field Education Coordinator.

Proposal No. SCWK-12-U-16
Change course title, description, and prerequisites.

**SCWK 4643. Social Work Practicum II.**  
The second in a sequence of two field practicums. Educationally directed and professionally supervised direct service activities providing practical experience in the application of social work values, knowledge, and skills acquired in social work foundation courses. Two hundred (200) clock hours of field placement and a weekly seminar of two hours. Prerequisites: SCWK 4641, good standing in the B.S.W. degree program, and permission of the Social Work Field Education Coordinator.

Proposal No. SCWK-12-U-17
Create new course.

**SCWK 4386. Directed Research in Social Work.**  
Individual instruction in supervised research experience in social work. May entail library research, data collection, data entry, statistical analysis and/or assistance in planning and conducting parts of a research project. A paper on the research experience is required. May be repeated for a maximum of 3 semester credit hours. Prerequisites: SCWK 3335, SCWK 33XX [requested SCWK 3339 Social Welfare: Policy and Advocacy II], SCWK 33XX [requested SCWK 3341 Social Work Practice II], SCWK 33XX [requested 3343 Social Work Research and Evaluation II], consent of the instructor, and admission to the B.S.W. degree program.

Proposal No. SCWK-12-U-18
Create new course.

**SCWK 4317. Principles of Forensic Social Work.**  
Principles and methods of generalist social work in the areas of criminal and juvenile justice across system levels and practice settings. Prerequisite: SCWK 2331.
Proposal No. SCWK-12-U-19
Create new course.
**SCWK 4319. Principles of Geriatric Social Work.** 3(3-0)
Principles and methods of generalist social work in the area of gerontology across system levels and practice settings. Prerequisite: SCWK 2331.

Proposal No. SCWK-12-U-20
Create new course.
**SCWK 4315. Principles of Health Social Work.** 3(3-0)
Principles and methods of generalist social work in the area of health care across system levels and practice settings. Prerequisite: SCWK 2331

Proposal No. SCWK-12-U-21
Create new course.
**SCWK 4313. Principles of Mental Health Social Work.** 3(3-0)
Principles and methods of generalist social work in the area of mental health across system levels and practice settings. Prerequisite: SCWK 2331.

Proposal No. SCWK-12-U-22
Create new course.
**SCWK 4311. Principles of Youth and Family Social Work.** 3(3-0)
Principles and methods of generalist social work with children, adolescents, and families across system levels and practice settings. Prerequisite: SCWK 2331.

Proposal No. SCWK-12-U-23
Create new course.
**SCWK 4331 The Social Work Profession II.** 3(3-0)
Capstone course in social work, reinforcing students’ social work identity, life-long learning, and career development. Includes the B.S.W. degree program exit exam, social work career development, licensure preparation, and emphasizes life-long learning. Prerequisites: SCWK 4641 and registration or credit in SCWK 4643.

**COLLEGE OF BUSINESS ADMINISTRATION**

**Department of Accounting and Finance**

Proposal No. ACCT-12-U-01
New course.
**ACCT 3356. Systems Analysis and Design.** 3(3-0)
Analysis and design techniques required for implementing medium to large-scale computer information systems. Development of requirements for personnel, software and equipment for
typical applications. Prerequisites: ACCT 2302 and ISYS 2302. Credit may not be obtained in both ACCT 3356 and ISYS 3356.

Proposal No. ACCT-12-U-02
Delete course.

ACCT 4217. Accounting Systems. 2(2-0)

Proposal No. ACCT-12-U-03
Modify degree plan for the Bachelor of Business Administration with a major in Accounting.
1. Change BUAD 1101 to UNIV 1101 (Fr 1) and add UNIV 1102 (Fr 2)
2. Change ACCT 4308 (Sr 1) to ACCT 3308 and move to Jr 1; ACCT 4217 (Sr 2) to ACCT 4317 and move to Sr 1; **Elective 3 and Nonbusiness Elective 3 to **Elective 2 and Nonbusiness Elective 2 (Sr 1); Elective 3 to Elective 1 (Sr 2)
3. Change **footnote course ISYS 3356 to BCOM 3206.
4. Add BUAD 2101 (So 1)
5. Add ACCT 3356 (Jr 2); ACCT 4218 (Jr 2)
6. Remove BUAD 3101 (Jr 1)
7. Remove ACCT elective (Sr 1)
8. Move BUAD 2374 (Fr 2 to So 2); +BCOM 2206 (So 1 to Fr 2); BCOM 2207 (So 2 to So 1); BUAD 3211 (Jr 1 to Sr 1); ACCT 4305 (Jr 2 to Sr 2)

Proposal No. ACCT-12-U-04
New course.

ACCT 4310. Accounting Systems. 3(3-0)
Principles and procedures of the design and installation of an accounting system with emphasis on producing the information necessary for decision making. Analysis of accounting data using spreadsheet and accounting software. Prerequisites: ACCT 4311 and ISYS 3356.

Proposal No. ACCT-12-U-06
Change course hours, prerequisite, and number.

ACCT 4342. Business Law for Accountants. 3(3-0)
Sales and commercial paper; the Uniform Commercial Code in Texas; the law of agency; business organization formulation and dissolution; accountants’ legal responsibility; federal securities regulation; insurance; suretyship; property; wills, estates and trusts. Prerequisite: BUAD 3341.

PENDING Proposal No. ACCT-12-U-07
Modify the Bachelor of Business Administration in Accounting degree plan.
1. Change +BCOM 2206 (Fr. 2nd) to BCOM 33XX [3306], and move to (Jr. 1st) and remove +footnote
2. Remove BCOM 2207 (So. 1st)
3. Remove BUAD 3100 (Jr. 1st)
4. Remove ACCT 4218 (Jr. 2nd)
5. Move BUAD 3355 (Jr. 1st to Jr. 2nd); MGMT 3351 (Jr. 2nd to Sr. 1st); Nonbusiness Elective 2 (Sr. 1st to Fr. 2nd and change to Nonbusiness Elective 3)
6. Change BUAD 3211 to BUAD 33XX [3311] (Sr. 1st)
7. Change **Elective 2 to **Elective 3 (Sr. 1st)
8. Change ACCT 4242 to ACCT 43XX [4342] (Sr. 2nd)
9. Change ACCT elective 2 and Elective 1 to ACCT elective 3 (Sr. 2nd)

**Proposal No. BCOM-12-U-1**
Delete course.
**BCOM 2206. Business Writing** 2(2-0)

**Proposal No. BCOM-12-U-2**
Change course hours and number for BCOM 2207.
**BCOM 2107. Business Presentations.** 1(1-0)
Communicating effectively in meetings, roundtables, project teams and individual presentations; using technology to enhance presentations; applying appropriate psychology and sensitivity when interacting professionally. Prerequisite: COMS 1315 and sophomore standing.

**Proposal No. BCOM-12-U-3**
Create new course.
**BCOM 3306. Business Communication.** 3(3-0)
Principles of business communication through letters, memos, email, text messages, group leadership participation, and presentations. Clear, accurate, and focused communication; practical psychology with attention to communication ethics and diversity. Prerequisite: ENGL 1301 and ENGL 1302 and junior standing.

**Proposal No. FINC-12-U-1**
Modify the Bachelor of Business Administration in Finance degree plan.
1. Change +BCOM 2206 (So. 1st) to BCOM 3306 and move to (Jr. 1st) and remove +footnote
2. Change BCOM 2207 to 2107 (So. 2nd)
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1st)
4. Change BUAD 3211 to BUAD 3341 (Jr. 1st)
5. Change ACCT Elective 2 to ACCT Elective 3 (Sr. 1st)
6. Divide Elective 6 to Elective 3 (Sr. 1st & So. 1st)
7. Move BUAD 3355 (Jr. 1st to Jr. 2nd); MGMT 3351 (Jr. 2nd to Sr. 1st)

**Department of Information Systems**

**Proposal No. ISYS-12-U-01**
Change course description.
**ISYS 3356. Systems Analysis and Design.** 3(3-0)
Analysis and design techniques required for implementing medium to large-scale computer information systems. Development of requirements for personnel, software and equipment for typical applications. Prerequisites: ACCT 2302 and ISYS 2302. Credit may not be obtained in both ACCT 3356 and ISYS 3356.

Proposal No. ISYS-12-U-1
Modify the Bachelor of Business Administration in Information Systems degree plan

1. Change +BCOM 2206 (So. 1st) to BCOM 3306 and move to (Jr. 1st) and remove +footnote
2. Change BCOM 2207 to 2107 (So. 2nd)
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1st)
4. Change BUAD 3211 to BUAD 3341 (Jr. 1st)
5. Change ACCT Elective 2 to ACCT Elective 3 (Sr. 1st)
6. Divide Elective 6 to Elective 3 (Sr. 1st & So. 1st)
7. Move BUAD 3355 (Jr. 1st to Jr. 2nd); MGMT 3351 (Jr. 2nd to Sr. 1st)

Department of Management and Marketing

Proposal No. BUAD-12-U-01
New course.

BUAD 2101. QuickBooks: Business Applications.  1(1-0)
Introduction to basic accounting transactions and reports using the QuickBooks software program.

Proposal No. BUAD-12-U-2
Change course hours and number.

BUAD 3341. Business Law.  3(3-0)
Historical background and role of law in business and society; general principles of the law of contracts, personal property, secured transactions, sales and commercial paper; the Uniform Commercial Code as adopted in Texas and other applicable Texas statutes. Prerequisite: junior standing.

Proposal No. BUAD-12-U-3
Delete course

BUAD 3100. Diversity in the Workplace.  1(1-0)

Proposal No. BUAD-12-U-4
Delete course

BUAD 3101. Fundamentals of Business Ethics.  1(1-0)

Proposal No. GENB-12-U-1
Modify the Bachelor of Business Administration in General Business degree plan.
1. Change +BCOM 2206 (So. 1\textsuperscript{st}) to BCOM 3306 and move to (Jr. 1\textsuperscript{st}); remove footnote+
2. Change BCOM 2207 to 2107 (So. 2\textsuperscript{nd})
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1\textsuperscript{st})
4. Change BUAD 3211 to BUAD 3341 (Jr. 1\textsuperscript{st})
5. Move Nonbusiness elective (Sr. 1\textsuperscript{st} & 2\textsuperscript{nd} to So. 1\textsuperscript{st} & 2\textsuperscript{nd}); move Elective (Sr. 2\textsuperscript{nd} to Jr. 2\textsuperscript{nd})
6. Distribute Business, adv. 9 (Jr. 1\textsuperscript{st}) as ACCT, adv. (Jr. 1\textsuperscript{st}); FINC, adv. (Sr. 1\textsuperscript{st}); and increase of Business, adv. (Sr. 1\textsuperscript{st}) from 6 to 9
7. Distribute Business, adv., 9 (Jr. 2\textsuperscript{nd}) as ISYS, adv. (Jr. 2\textsuperscript{nd}); MKTG, adv. (Jr. 2\textsuperscript{nd}); and increase of Business, adv. (Sr. 2\textsuperscript{nd}) from 5 to 8 (but see item 9)
8. Move MKTG 3324 (Sr. 1\textsuperscript{st} to Jr. 1\textsuperscript{st})
9. Further increase Business, adv. (Sr. 2\textsuperscript{nd}) from 8 (see item 7) to 9

Proposal No. MKTG-12-U-1
Change course title.

MKTG 3360. Sales. 3(3-0)
The personal selling process and the use of a professional, customer-oriented, problem-solving approach in selling situations. The sales job, selection of salespeople, sales training programs and coordination/control of the sales function. Development of fundamentals of professional selling skills. Prerequisite: MKTG 3324.

Proposal No. MKTG-12-U-2
Change title and description.

MKTG 4321. Business Negotiation Skills. 3(3-0)
Emphasis on fundamental skills in the art of negotiation across a variety of settings, including business, law, marketing, sales; basics of both collaborative and competitive approaches including planning tools and techniques. Prerequisite: MKTG 3324.

Proposal No. MKTG-12-U-3
Change course title.

MKTG 3364. Promotional and Social Media Strategies. 3(3-0)
Demand-stimulation processes of all elements of the promotional mix at all levels of the channel of distribution. Analysis of theoretical models and pragmatic applications of promotion in an organization. Prerequisite: MKTG 3324.

Proposal No. MKTG-12-U-4
Correct course prerequisite.

MKTG 3365. Marketing Research. 3(3-0)
Marketing research methods as applied to management problems involving marketing strategy and policy formulation, and economic-industry-firm-sales forecasts. Prerequisites: BUAD 3265 and MKTG 3324.
Proposal No. MKTG-12-U-5
Change course prerequisites.

**MKTG 4350. Consumer Behavior.** 3(3-0)
Analysis and evaluation of the consumer’s position in the marketing structure including patterns of consumer behavior and the psychological, social and cultural forces that underlie such patterns. Prerequisites: MKTG 3324 and MKTG 3365.

Proposal No. MKTG-12-U-6
Modify the Bachelor of Business Administration in Marketing degree plan.
1. Change +BCOM 2206 (So. 1st) to BCOM 3306 and move to (Jr. 1st) and remove +footnote
2. Change BCOM 2207 to 2107 (So. 2nd)
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1st)
4. Change BUAD 3211 to BUAD 3341 (Jr. 1st)
5. Remove BUAD 3265 and add ISYS 3358 (Jr. 2nd)
6. Change MKTG Elective 6 to MKTG Elective 3 (Sr. 1st)
7. Change MKTG Elective 3 (Sr. 2nd) to Nonbusiness Elective 3 and move to (So. 1st)
8. Move BUAD 3355 (Jr. 1st to Jr. 2nd); MKTG 3351 (Jr. 2nd to Sr. 1st)
9. Add MKTG Elective 3 (Sr. 2nd)

Proposal No. MGMT-12-U-1
Delete course.

**MGMT 2210. Introduction to Entrepreneurship.** 2(2-0)

Proposal No. MGMT-12-U-2
Delete course.

**MGMT 3110. Entrepreneurial Creativity and Idea Refinement.** 2(2-0)

Proposal No. MGMT-12-U-3
Create new course.

**MGMT 3310. Introduction to Entrepreneurship and Creativity.** 3(3-0)
The entrepreneurial process; how business personnel build basics out of ideas. Types of entrepreneurs are studied as well as the organizations. How strategy, marketing, accounting, organization behavior, finance, and business communication are all needed for success. How organizations can foster instead of stifle creativity by redefining paradigms. Creating new and potentially stronger businesses.

Proposal No. MGMT-12-U-4
Change course prerequisite.

**MGMT 3325. Human Resource Management.** 3(3-0)
Policies and practices relating to recruitment, selection, training and development, performance
appraisal, reward system and employee relations. Strategic human resource planning, equal employment opportunity laws and international human resource management issues. Prerequisite: credit or registration in MGMT 3312.

Proposal No. MGMT-12-U-5
Change course prerequisites.

**MGMT 4328. Labor Relations.** 3(3-0)
Legal and social framework for and the process of negotiating a labor contract and handling typical grievance issues. Prerequisite: MGMT 3312 and MGMT 3325.

Proposal No. MGMT-12-U-6
Add course prerequisites.

**MGMT 4350. Industry Relations.** 3(3-0)
Problems, hazards and procedures involved in establishing and maintaining good union management relationships. Prerequisite: MGMT 3312 and MGMT 3325.

Proposal No. MGMT-12-U-7
Modify the Bachelor of Business Administration in Management degree plan
1. Change +BCOM 2206 (So. 1st) to BCOM 3306 and move to (Jr. 1st) and remove +footnote
2. Change BCOM 2207 to 2107 (So. 2nd)
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1st)
4. Change BUAD 3211 to BUAD 3341 (Jr. 1st)
5. Change MGMT Elective 5 to MGMT Elective 6 (Sr. 2nd)
6. Move BUAD 3355 (Jr. 1st to Jr. 2nd); ISYS 3358 (Jr. 2nd to Sr. 1st); Nonbusiness Elective 3 (Sr. 1st to So. 1st)

Proposal No. MGMT-12-U-8
Modify the Bachelor of Business Administration in Management-Human Resources degree plan.
1. Change +BCOM 2206 (So. 1st) to BCOM 3306 and move to (Jr. 1st) and remove +footnote
2. Change BCOM 2207 to 2107 (So. 2nd)
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1st)
4. Change BUAD 3211 to BUAD 3341 (Jr. 1st)
5. Change MGMT Elective 2 to MGMT Elective 3 (Sr. 2nd)
6. Move BUAD 3355 (Jr. 1st to Jr. 2nd); ISYS 3358 (Jr. 2nd to Sr. 1st); Nonbusiness Elective 3 (Sr. 1st to So. 1st)

Proposal No. MGMT-12-U-9
Modify the Bachelor of Business Administration in Management-Materials and Supply Chain Management degree plan
PROPOSED CHANGES:
1. Change BCOM 2206 (So. 1st) to BCOM 3306 and move to (Jr. 1st) and remove footnote.
2. Change BCOM 2207 to 2107 (So. 2nd).
3. Remove BUAD 3100 & BUAD 3101 (Jr. 1st).
4. Change BUAD 3211 to BUAD 3311 (Jr. 1st).
5. Change Elective 3 to Elective 4 (Sr. 2nd).
6. Move BUAD 3355 (Jr. 1st to Jr. 2nd); ISYS 3358 (Jr. 2nd to Sr. 1st); Nonbusiness Elective 3 (Sr. 1st to So. 1st).

**COLLEGE OF EDUCATION AND HUMAN PERFORMANCE**

*Department of Health and Kinesiology*

**Proposal No. EDKN-11-U-10**
Add an option (Performance Psychology Option) for the Bachelor of Science in Kinesiology-Exercise Science. Relative to the Exercise Science concentration.

**Proposal No. EDKN-12-U-02**
New course.
**EDKN 3395. Topics in Kinesiology and Sport.** 3(3-0)
Current issues and special topics in kinesiology and sport are identified and researched. Course may be repeated for credit as topics vary.

**Proposal No. EDKN-12-U-03**
Modify degree plan for the Bachelor of Science in Kinesiology (Sport and Leisure Studies).
1. Replace EDHL Elective, adv. (Sr 1st) with EDHL 4344.
2. Change footnote EDHL advanced electives select from any advanced EDHL course to EDHL advanced electives select from any advanced EDHL course except EDHL 4344.
3. Add EDKN 3395 to EDKN advanced electives footnote.
4. Add EDKN 4328 to EDKN advanced electives footnote.

**Proposal No. EDKN-12-U-04**
1. Make the following changes in the kinesiology minors:
   a. Kinesiology-Coaching minor – insert “and” before EDKN 3436 or EDKN 4325.
   b. Kinesiology-Exercise Science minor – change EDKN 4329 or 4401 to EDKN 4320, EDKN 4329 or EDKN 4401, insert “and” before EDKN 4325.
   c. Kinesiology-Physical Education minor – change “21 credit hours” to “18 credit hours,” change “Declaration of the minor with this concentration is restricted to students pursuing a teacher certification degree in another discipline.” to “Declaration of this minor is restricted to students pursuing a teacher certification degree in another discipline.”
2. Allow Kinesiology-Coaching minor to potentially require more than 18 credit hours (18-19 credit hours).
3. Allow Kinesiology-Exercise Science minor to require more than 18 credit hours (19-20 credit hours).

Proposal No. EDKN-12-U-05
Change hours and description.
EDKN 2130. Sport Business Apprenticeship.
An introductory field experience in sport business. Forty contact hours in the field in addition to in-class meetings, allowing the student to explore career options in a practical work setting, normally on campus. May be repeated for credit. Prerequisites: Kinesiology adviser consent.

Proposal No. EDKN-12-U-06
Change prerequisites.
EDKN 4320. Introductory Research Methods.
An introduction to research methodologies commonly employed in the health, fitness and exercise science disciplines. Prerequisites: MATH 1314 and junior standing.

Proposal No. EDKN-12-U-07
EDKN 3350. Kinesiology and Sport in Society.
Impact of kinesiology and sport on society and its institutions. Individual characteristics, motivation, psychological interventions and social processes that influence exercise and human performance behaviors. Prerequisite: junior standing.

Department of Teacher and Bilingual Education

Proposal No. EDED-12-U-01
Change course hours.
EDED 3362. Instructional Methods and Strategies, Secondary Schools.
Emphasis will be given to practical activities in the classroom stressing various methods, strategies and learning styles appropriate for a secondary situation. 50% field-based. Prerequisites: EDED 3302 and EDED 3333.

Proposal No. EDED-12-U-02
Change course hours.
EDED 3333. Classroom Management and Organization in the Middle School.
Includes a general overview of the middle school, comparison and contrast to high school and uniqueness of the middle school scenario. Middle school students and their problems will be emphasized as well as teaching strategies and techniques with the middle school student in mind. Also included is a study of individual and group behavior change and behavior management with
middle school students. Practical application in the classroom is emphasized. 50% field-based. Prerequisite: admission to teacher education.

Proposal No. EDED-12-U-03
Change course hours.

EDED 3302. Development and Behavior of the Child and Adolescent. 3(3-4)
The child and adolescent in contemporary society: ethnic background, interests, attitudes, values and needs, self-concept, adjustment mechanisms; the learning process; social, emotional and sexual development. Identification and teaching mainstreamed and special populations of students. Methods for working effectively with the elementary and secondary student. Practical application in the classroom emphasized. 50% field-based. Prerequisite: admission to teacher education.

FRANK H. DOTTERWEICH COLLEGE OF ENGINEERING

Department of Civil and Architectural Engineering

Proposal No. AEEN-12-U-01
Modify degree plan for Bachelor of Science in Architectural Engineering.

1. Remove AEEN 3331 (Jr 1) from Degree Plan.
2. Add AEEN 3337 (Jr 2).
3. Move AEEN 3335 (Jr2 to Jr1), ^Social/behavioral (Jr2 to Sr 1), AEEN 2325 (So 1 to Fr 2), AEEN 4320 (Sr 1 to Jr 2), STAT 4303 (Sr 1 to Sr 2), AEEN 4346 (Sr 2 to Sr 1), HIST 1301 (Fr 2 to So 1), HIST 1302 (So1 to So 2), POLS 2301 (So 2 to So 1), and POLS 2302 (Jr 2 to Jr 1).
4. Change "AEEN 4316 or MATH" (Jr 1) to “Mathematics Elective*” (Jr 2) and change footnote to “*Mathematics elective recommended: MATH 3415, MATH 4341, MATH 4372, MATH 4374 or any other approved upper-level mathematics course.”
5. Drop the MATH alternative accompanying AEEN 3304 (Jr 2).
6. Change footnote marker on Engineering Elective (Sr 1 and Sr 2) to Engineering Elective†, and change footnote to “†Engineering electives: AEEN 3325, AEEN 3348, AEEN 4333, AEEN 4336, AEEN 4316, CEEN 2212/CEEN 2113, CEEN 4314, CEEN 4317, CEEN 4368; ITEN 4332, ITEN 4353 and MEEN 3348.”
7. Change footnote marker on Science Elective (Sr 2) to Science Elective†† and change footnote to “††Science elective recommended: CHEM 1312/CHEM 1112, BIOL 1316/BIOL 1106, GEOL 1303 or GEOL 3305.”
8. Add footnote marker to ^Visual/performing arts+ (So 1) and add footnote “Recommended: ARTS 2303.”
10. Correct total semester hours Fr2 from 187 to 18.
Proposal No. AEEN-12-U-04
Change course prerequisites.

**AEEN 4279. Senior Design Project I.** 2(1-3)
Applications of engineering concepts covered in the upper division courses to architectural engineering problems including design of building structural and service systems, with an emphasis on teamwork. Introduction to practical aspects of construction and professional ethics. Prerequisites: AEEN 4320 and AEEN 4316 or AEEN 3304.

Proposal No. AEEN-12-U-5
Change prerequisites.

**AEEN 4289. Senior Design Project II.** 2(1-3)
Applications of engineering concepts covered in the upper division courses to architectural engineering problems including design of building structural and service systems, with an emphasis on teamwork. Introduction to practical aspects of construction and professional ethics. Prerequisite: AEEN 4279.

Proposal No. AEEN-12-U-6
Change prerequisites.

**AEEN 4320. Building Services Engineering.** 3(3-0)
Planning and design of heating, ventilation, air-conditioning, plumbing, power distribution and lighting systems; introduction to fire protection systems. Prerequisites: AEEN 1320, AEEN 3335, and EEEN 3331.

Proposal No. AEEN-12-U-7
Change prerequisites.

**AEEN 4336. Selected Topics.** V:1-3
One or more topics of architectural engineering. May be repeated when topic changes. Prerequisite: approval of the instructor.

Proposal No. AEEN-12-U-8
Change prerequisites.

**AEEN 4346. Building System Management.** 3(3-0)
Basic concepts in building energy systems. Electrical, heating, ventilation and air conditioning (HVAC) systems; configuration, operation, control efficiency and evaluation methods. Prerequisites: AEEN 3337, AEEN 4320.

Proposal No. AEEN-12-U-9
Create new course.

**AEEN 3350. Facility Management.** 3(3-0)
Introduction to concepts of facility management, including links between assets and users; owner’s perspective; and life cycle costs. Prerequisite: approval of the instructor.

**Pending Proposal No. AEEN-12-U-10**
Create new undergraduate certificate in Facility Management.

**Certificate in Facility Management**
All students are eligible for an undergraduate Certificate in Facility Management, representing a multidisciplinary approach to facility operations. The 12-hour certificate requires AEEN 33XX [3348], Facility Management, and 3 other hours of selected engineering courses, and 6 hours of selected non-engineering courses, which together must include 9 hours beyond specific degree requirements.

*Eligible engineering courses include: AEEN 3325, AEEN 4310, AEEN 4336, ITEN 2330, ITEN 3311, ITEN 3313, ITEN 3323, ITEN 4332, and any engineering course petitioned for and approved by the certificate coordinator.*

*Eligible non-engineering courses include: ACCT 2301, BUAD 3101, BUAD 3211, ECON 2301, FINC 3321, FINC 3345, MGMT 3322, MGMT 3325, PHIL 3311, and any non-engineering courses petitioned for and approved by the certificate coordinator.*

**Proposal No. CEEN-12-U-01**
Change course prerequisites.

**CEEN 3303. Structural Analysis.** 3(3-0)
Statically determine structures. Moving loads. Analysis of statically indeterminate structures by consistent deformation, slope-deflection and moment-distribution. Prerequisites: credit in CEEN 3311 or registration in CEEN 3311, a grade of B or higher in CEEN 2301 and approval of instructor.

**Proposal No. CEEN-12-U-02**
Modify degree plan for Bachelor of Science in Civil Engineering.

1. Replace CEEN 1201 with UNIV 1101 (Fr 1) and UNIV 1102 (Fr 2).
2. Move CHEM 1311/1111 (Fr 1 to So 1), PHYS 2325/2125 (Fr 2 to Fr 1) and PHYS 2326/2126 (So 1 to Fr 2).
3. Replace Math + Science Elec.*** with Mathematics Elective *** (Ju 2).
4. Replace AEEN 1301 in Fr 1 with AEEN 1310
5. Change footnotes to read:
   †Recommended: ARTS 2303.
   ††Approved science electives: BIOL 1306, CHEM 1312/CHEM 1112, Geol 1303 and GEOL 3305.
   *Communication: COMS 2374 or ENGL 2374.
   **Engineering electives: CEEN 4314, CEEN 4315, CEEN 4317, CEEN 4326, CEEN 4336, CEEN 4364, CEEN 4367, CEEN 4368 and CEEN 4369.
Mathematics electives recommended: MATH 3415, MATH 4341, MATH 4372, MATH 4374 or any other approved upper-level mathematics course.

**Department of Electrical Engineering and Computer Science**

**Proposal No. CSEN-11-U-02**
Change course title.
CSEN 4366. Programming Languages. 3(3-0)

**Proposal No. EEEN-11-U-01**
Create new course.
EEEN 4360. Robotics II. 3(3-0)
Multidisciplinary development to robotics, combining concepts from electrical engineering, mechanical engineering and computer science. Topics include sensing, communication, localization, planning and navigation. Prerequisite: MEEN 4355 or consent of instructor.

**Proposal No. EEEN-12-U-02**
New course.
EEEN 4362. Image Processing and Biometrics. 3(3-0)
Basic image processing: intensity transformations, spatial and frequency domain filters, image restoration, and compression. Biometric applications: fingerprint and facial recognition; biometric issues: privacy, legal concerns, testing, and standards. Prerequisite: EEEN 3333 or consent of instructor. Short Banner title: [Image Proc. and Biometrics]

**Department of Environmental Engineering**

**Proposal No. EVEN-11-U-02**
New course.
EVEN 4386. Air Pollution Control. 3(3-0)
A fundamental approach to air pollutants classification, sources and effects; theories of air quality, air pollution control and atmospheric science; control technologies of particulate and gaseous air pollutants and process design variables; introduction to air pollution meteorology and dispersion modeling. Credit may not be obtained in both EVEN 4386 and CHEN 4386. Prerequisites: CEEN 3392 and senior standing.

**Proposal No. EVEN-11-U-03**
Change course hours.
EVEN 3321. Environmental Engineering Lab. 3(1-4)

**Proposal No. EVEN-11-U-04**
Modify requirement for Bachelor of Science in Environmental Engineering.
1. Replace CHEN 4386 with EVEN 4386 in Sr 1.
2. Remove CHEN 3392 from course electives for Focus Area of Water Resources.
3. Remove CHEN 4279 from course electives for Focus Area of Water Resources and Focus Area of Sustainability and Green Engineering.
4. Remove NGEN 4337 from the course electives for all four focus areas.
5. Remove CEEN 4379 from course electives for Focus Area of Water Resources and Focus Area of Sustainability and Green Engineering.
6. Remove CEEN 4364 from course electives for Focus Area of Water Resources.
7. Add MEEN 3344 into the course electives for all four focus areas.
8. Add EVEN 3399 to the course electives for all four focus areas.
9. Replace BCOM2304 in Jr 1 with "Oral communication."

Proposal No. EVEN-12-U-01
Change course title and prerequisites.

**EVEN 4110. Environmental Engineering Ethics Seminar.**
1(1-0)
Familiarization and instruction for students in the recognition and formulation of ethical questions and issues centered about environmental engineering professional practice. Approaches to articulate and attempt resolution of ethical issues in engineering including safety and the environment. Prerequisite. junior standing.

Department of Industrial Management and Technology

**PENDING Proposal No. MTEN-11-U-01**
Modify the degree plan for the Bachelor of Science in Industrial Management and Technology.

1. Candidates for the Industrial Management and Technology degree must also possess a grade point average of 2.5 in all course work specified for their major as well as a 2.0 for all business administration course work and a 2.0 for all math/science course work specified for the degree.
2. DEPARTMENT OF INDUSTRIAL MANAGEMENT AND TECHNOLOGY (MTEN)
3. Assistant Professor Medellin, Polastri
4. A minor in Industrial Management and Technology requires the following course work: ITEN 1311, ITEN 2301, ITEN 2330 and at least three approved advanced ITEN courses in a specified concentration.
5. Industrial Management and Technology: The minimum requirement shall be 18 semester hours, consisting of ITEN 1311, ITEN 2301, ITEN 2330 and at least three approved advanced ITEN courses in a specified concentration.

See p. 6
SUMMARY OF CHANGES:
See indicated pages

1. Change graduation requirement description, Engineering section, page 270,
2. Change program title, Engineering section, page 289,
3. Change faculty listing, faculty section, page 289
4. Change program minor description, Engineering section, p. 289
5. Change program minor description, Arts and Science section, p. 119

Program Changes, see p. 6

6. Move HIST 1301 (Fr 1st to Fr 2nd), HIST 1302 (Fr 2nd to So 1st), CHEM (So 1st to Fr 1st).
7. Move ECON 2301 (So 1st to Jr 1st), PHYS (So 2nd to So 1st), ITEN 2320 (Jr 1st to So 2nd).
8. Move Visual/performing arts (Jr 1st to So 2nd), Elective (So 2nd to Jr 2nd), Global learning (Jr 2nd to Jr 1st)
9. Change ITEN 3310 or ITEN 3313 (Jr 1st) to ITEN 3313 (Jr 2nd).
10. Change ITEN 3300 or ITEN 3331 (Jr 2nd) to ITEN 3331 (Jr 1st) and ITEN 33XX [3306] (Jr 1st).
11. Delete ITEN 3315 (Sr 1st).
12. Change ITEN 3323 or 3324 (Sr 1st) to ITEN 3323.
13. Move ITEN 4352 (Sr 2nd to Sr 1st).
14. Change ITEN, adv.4 (Sr 2nd) to ITEN 4332.
15. Change Business, adv.5 (Sr. 1st) AND (Sr. 2nd) to ITEN, adv.4 or Business, adv.5 (both places).
16. Add ITEN 43XX [4340] (Sr 2nd) [see proposal ITEN_11_U_07 ]
17. Change Note 4 to,

Chosen from ITEN 3308, ITEN 3310, ITEN 3311, ITEN 3315, ITEN 3321, ITEN 3324, ITEN 33XX [3326], ITEN 33XX [3333], ITEN 33XX [3336], ITEN 33XX [3338], ITEN 33XX [3345], ITEN 3352, ITEN 3399, ITEN 4303, ITEN 43XX [4330], ITEN 43XX [4340], ITEN 4353, ITEN 4362 and ITEN 4399; ITEN 4336 is the department’s capstone course.

18. Change Note 5 to,

MTEN majors who elect to complete advanced business electives instead of advanced ITEN electives (maximum of two), with the intent of fulfilling Minor in Business Administration requirements, must complete at least one of the following four courses: MKTG 3324; MGMT 3325; MGMT 4324; BUAD 3355; second business elective can be any approved advanced business course.

Proposal No. MTEN-11-U-02
Create a new course.

ITEN 3333. Industrial Scheduling. 3(3-0)
Planning, scheduling and monitoring of construction projects including development of critical path networks (CPM & PERT), Gantt bar charts and construction cost control and reporting practices. Prerequisite: credit or registration in ITEN 3323.

Proposal No. MTEN-11-U-04
Create a new course

**ITEN 3336. Industrial Hygiene I.**

An introduction to industrial hygiene and recognition of industrial hazards. Prerequisite: ITEN 2330.

Proposal No. MTEN-11-U-05
Create a new course

**ITEN 3338. Industrial Hygiene II.**

Industrial hazard evaluation and control methods, duties of safety professionals and government regulations. Prerequisites: ITEN 2330, credit in ITEN 3336 recommended.

Proposal No. MTEN-11-U-06
Create a new course

**ITEN 3345. Advanced Graphics and Modeling.**

Advanced graphics with an emphasis in 3D design and solid modeling. Prerequisite: credit or registration in ITEN 3300.

Proposal No. MTEN-11-U-07
Create a new course

**ITEN 4340. Leadership and Supervision.**

Supervision in industrial settings; ways and means to assess, motivate and train technical employees to help meet production goals and safety guidelines. Emphasis on the supervisor’s functional and essential areas of knowledge, relations with others and personal development. Prerequisites: ITEN 3300, ITEN 3331.

Proposal No. MTEN-11-U-09
Add course prerequisite.

**ITEN 4332. Hazardous Waste and Fire Safety.**

Study of fire prevention and hazardous substances. Hazard mitigation and containment polities will be reviewed. Prerequisite: CHEM 1405 or CHEM 1311/CHEM 1111.

Proposal No. MTEN-11-U-10
Change course title and description.

**ITEN 1315. Introduction to Manufacturing Processes.**

Manufacturing processes of products using metal, plastic and wood. Laboratory experiences include projects related to machine tool operations, injection molding, thermoforming, CNC lathe and milling machining.
Proposal No. MTEN-11-U-11
Change course title and prerequisite.
**ITEN 3313. Energy Systems.**
3(3-1)
An introduction to the basic principles of energy and power transmission for industrial technologists and non-engineers. Prerequisite: PHYS 1375 or equivalent.

Proposal No. MTEN-11-U-12
Change course title and description.
**ITEN 3323. Cost Estimating.**
3(3-0)
Practical methods used in development of cost estimates in industrial management and technology, with emphasis on software used in the construction industry. Prerequisite: junior standing.

Proposal No. MTEN-11-U-13
Change course description, lab hours and prerequisite.
**ITEN 3315. CAD/CAM.**
3(3-0)
Survey of computer-aided design (CAD) and manufacturing (CAM) that includes 2D and 3D geometry construction and tool path creation. Prerequisites: ITEN 1315 and credit or registration in ITEN 3300.

Proposal No. MTEN-11-U-16
Change course title.
**ITEN 3349. Lean Production.**
3(3-0)
Planning and developing benchmarks for manufacturing operations; measuring, assessing and enhancing productivity within industrial settings, including an overview of Lean Production concepts. Prerequisite: junior standing.

Proposal No. MTEN-11-U-17
Create new course
**ITEN 3306. Manufacturing Processes.**
3(3-1)
A survey of traditional and nontraditional manufacturing processes used in product development and production. Prerequisite: ITEN 1315.

Proposal No. MTEN-11-U-18
Create new course
**ITEN 4330. Manufacturing Systems.**
3(3-0)
A holistic overview of manufacturing; design and solid modeling, robotics, CAD/CAM principles and tradition and nontraditional manufacturing concepts with an emphasis in design analysis and production enhancement. Prerequisites: ITEN 3306 and ITEN 3315 or ITEN 3345.
Proposal No. MTEN-12-U-1
Create new course
**ITEN 4320. Safety Program Administration.** 3(3-0)
An examination of safety administration issues that affect the workplace including safety awareness and loss control, regulation and compliance, and behavior assessment and modification. Prerequisites: ITEN 3336 or ITEN 3338.

Proposal No. MTEN-12-U-2
Create new course.
**ITEN 4333. Industrial Scheduling II.** 3(3-0)
Resource allocation and resource leveling, money and network schedules, project monitoring and control are covered with an emphasis on integrating costs and schedule, earned value, CPM in dispute resolution and litigation, schedule risk management. Prerequisite: ITEN 3333.

Proposal No. MTEN-12-U-3
Restate prerequisites.
**ITEN 3310. Fluid Power.** 3(3-1)
Systems, instruments and concepts utilized in the area of fluid power with emphasis on fundamental theories of operation, system design, component selection, maintenance and safety considerations. Includes an overview of fluid logic and electrical controls circuits. Prerequisite: 3 SCH of PHYS counting toward degree.

Proposal No. MTEN-12-U-4
Restate prerequisites.
**ITEN 3313. Energy Systems.** 3(3-1)
An introduction to the basic principles of energy and power transmissions for industrial technologists and non-engineers. Prerequisite: 3 SCH of PHYS counting toward degree.

Department of Mechanical and Industrial Engineering

Proposal No. MEEN-12-U-1
Modify degree plan for Bachelor of Science in Mechanical Engineering.
1. Move Math 2413 from freshman II to freshman I.
2. Move Math 2414 from first sophomore I to freshman II.
3. Move Math 3320 from sophomore II to sophomore I.
4. Move Math 3415 from Junior I to sophomore II.
5. Move Humanities A from freshman I to sophomore I.
6. Move Humanities B from sophomore I to junior I.
7. Change Humanities B electives from “2000 level” to any course satisfying general education B requirements.

Proposal No. MEEN-12-U-2
Change prerequisites.

**MEEN 2146. Engineering Measurements.** 1(0-3)
Basic experimental techniques and instrumentation commonly found in industry. Experimental planning and analysis. ASTM methods introduced. Data acquisition means studied. Significance of data and presentation (written and oral). Computer usage and report writing emphasized. Prerequisites: PHYS 2325/2125.

*Proposal No. MEEN-12-U-3*
Change prerequisites.

**MEEN 2302. Mechanics II (Dynamics).** (ENGR 2302) 3(3-0)
Kinematics of particles and rigid bodies; motion relative to translating and rotating reference frames. Kinetics of particles and rigid bodies: Newton's second law, work-energy and impulse and momentum. Introduction to vibrations. Prerequisites: CEEN 2301.

*Proposal No. MEEN-12-U-4*
Change prerequisites.

**MEEN 3145. Material Science Laboratory.** 1(0-3)
Tensile, impact, fatigue, hardness and hardenability, creep, phase and microstructure, corrosion testing and microscopic analysis. Ferrous and non-ferrous materials and polymers are studied. ASTM methods are introduced and applied. Introduction to data acquisition and recording. Reporting in both written and oral format. Prerequisite: CEEN 2301 or MEEN 2355 and MEEN 1310. Corequisite: MEEN 3344.

*Proposal No. MEEN-12-U-5*
Change prerequisites.

**MEEN 3347. Thermodynamics.** 3(3-0)
Basic laws governing energy transmission. Thermodynamic properties of liquids and vapors, the ideal gas law and the behavior of ideal gases. Concept of reversible process. Prerequisites: MATH 2414, and PHYS 2325/2125.

*Proposal No. MEEN-12-U-6*
Change prerequisites.

**MEEN 3348. Heat Transfer.** 3(3-0)
Fundamental laws relating to heat transfer including steady and transient heat conduction, forced, convection, natural convection and radiation. Introduction to heat exchanger design. Prerequisites: MEEN 3347, MEEN 3392, and MATH 3320.

*Proposal No. MEEN-12-U-7*
Change prerequisites.

**MEEN 4341. Application of Thermodynamics.** 3(3-0)
Design of power and refrigeration systems, mixing (or separation), multiphase, air conditioning and energy conversion processes. Prerequisites: MEEN 3347 and MATH 3415.

*Proposal No. MEEN-12-U-10*

Create new course

**MEEN 4371. Introduction to Unmanned Aerial Vehicles.** 3(3-0)
Foundations and basic components of Unmanned Aerial Vehicles (UAVs) from a system point of view, design considerations, payloads, communications, control and stability, navigation, UAV system roles and operations, control stations. Prerequisite: Senior Standing.

*Proposal No. MEEN-12-U-11*

Create new course

**MEEN 4372. Resource Optimization for Homeland Security.** 3(3-0)

*Proposal No. MEEN-12-U-12*

Create new course

**MEEN 4373. Intro to Information Analysis and Modeling in Security Engineering** 3(3-0)
Fundamental methods and tools used for information analysis and modeling related to homeland security. It will also introduce engineering and technical challenges of homeland security, including modeling and analysis, technological issues, command, control & situational awareness and data integration requirements. Prerequisite: Senior Standing in Mechanical Engineering, Electrical Engineering, or Computer Science, or approval from Instructor.

*Proposal No. MEEN-11-U-09*

Change course title.

**MEEN 1310. Engineering Graphics I.** (ENGR 1304) 2(2-3)
Introduction to computer-aided engineering design and analysis; principles of graphics, solid modeling, integrated applications of software in engineering drafting, design and problem solving.

*Proposal No. MEEN-11-U-10*

Change course title and description.

**MEEN 4355. Robotics I.** 3(3-0)
Multidisciplinary introduction to robotics, combining concepts from the fields of electrical engineering, mechanical engineering and computer science. Topics include locomotion, maneuverability, actuating, trajectory planning, motion control and sensing. Prerequisite: senior standing.
Proposal No. NGEN-12-U-1
Change hours of NGEN 3493 from 4 to 3. New Course number, NGEN 3393.

NGEN 3393. Natural Gas Drilling Engineering. 3(2-3)
Introduction to drilling equipment and methods, drilling fluids, casing and cementing of wells.
Application of computers to the drilling of wells. Contemporary methods of well completion.
Prerequisite: NGEN 3322 and NGEN/CHEN 3392.