UNDERGRADUATE CURRICULUM REVISIONS
Effective, Fall 2012

Proposal no. UNIV-11-U-01
Proposed catalog material:
[p.77: Other Degree Requirements, place between Major and Minor and Advanced Work]:
Writing Intensive Requirement (for students admitted Fall 2012 or later)
Candidates for all bachelor's degrees must complete at least one course designated as Writing Intensive (WI), preferably in their major field. Candidates must earn a grade of C or better in such a course.

DICK AND MARY LEWIS KLEBERG COLLEGE OF AGRICULTURE, NATURAL RESOURCES AND HUMAN SCIENCES

Department of Animal, Rangeland and Wildlife Sciences

Proposal no. ANSC-11-U-05
ANSC 1211. Emerging Issues and Opportunities in Animal Science. New course. 2(2-0)
Key issues and trends impacting care and use of livestock, and domestic and companion animals. Career opportunities in the animal science profession. [Abbrev. Banner title: Emerging Issues & Opp.]

Proposal no. ANSC-11-U-06
Modify B. S. in Agriculture, Animal Science.
Proposed Changes:
1. Add ANSC 1211 to Fr. 1st.
2. Move MATH 1314 (Fr. 1st to Fr. 2nd), CHEM 1311/1111 (Fr. 2nd to Soph. 1st), CHEM 1312/1112 (Soph. 1st to Soph. 2nd), AGRI 2372 (Soph. 2nd to Jr. 1st), "Literature/philosophy (Soph. 2nd to Jr. 1st), and PLSS 3410 (Jr. 1st to Sr. 1st).
3. Reduce credit hours of ANSC 3995 (Jr. 2nd) from 3 SCH to 1 SCH.

Proposal no. ANSC-11-U-07
Modify B. S. in Agriculture, Animal Science-Pre-Vet
Proposed Changes:
1. Add ANSC 1211 to Fr. 1st.
2. Move "Visual/performing arts (Fr. 1st to Fr. 2nd), CHEM 1311/1111 (Fr. 2nd to Soph. 1st), ANSC 2307 (Soph. 1st to Soph. 2nd), CHEM 1311 is prerequisite), CHEM 1312/1112 (Soph. 1st to Soph. 2nd), ANSC 2310 (Soph. 2nd to Soph. 1st), BIOL 2421 (Soph. 2nd to Jr.
1st), CHEM 3323/3123 (Jr. 1st to Jr. 2nd), CHEM 3325 (Jr. 2nd to Sr. 1st), and CHEM 4341 (Sr. 1st to Sr. 2nd).

3. Remove ANSC or BIOL, adv. (Sr. 2nd) from degree plan.
4. Add CHEM 3125 (by CHEM 3325) Sr. 1st and change footnote.

**ANSC 2310. Livestock Management Techniques. Change course description.**  
3(1-4)  
Application of animal handling and management techniques for major and minor livestock species including behavior of livestock species relevant to handling, methods of restraint and blood sampling. Prerequisite: ANSC 1419 and sophomore standing. Laboratory fee: $25

**ANSC 3350. Veterinary Office Management. New course.**  
3(2-3)  
Description: Management of the veterinary hospital. Emphasis on client relations, economics, record keeping, inventory, employment skills, and computer skills in the veterinary environment. Prerequisite: Acceptance into Veterinary Technology degree program, 10 hours of ANSC including ANSC 1419, ANSC 2307 and ANSC 2310 or prior departmental approval. Laboratory fee: $15

**ANSC 3355. Companion Animals. New course.**  
3(3-0)  
Study of canines and felines including methods of restraint, behavior, feeding, caring and human-animal bonding. Prerequisite: junior standing.

**ANSC 3358. Clinical Animal Pharmacology. New course.**  
3(2-3)  
Understanding drug orders and labels. Calculation of dosages and administration of oral, peritoneal and intravenous drugs and appropriate safety measures. Prerequisite: 16 hours of ANSC, including ANSC 3402-Veterinary Technology and ANSC 3350-Veterinary Office Management or prior departmental approval.

**ANSC 3402. Veterinary Technology. New course.**  
4(3-2)  
Current events, skills, knowledge pertinent to the occupation, laws and regulations governing the profession (Veterinary Licensing Act, Veterinary Rules of Professional Conduct and Program Standard Operating Procedures), ethical and professional requirements and veterinary medical terminology. Prerequisite: Acceptance into Veterinary Technology degree program, 10 hours of ANSC including ANSC 1419, ANSC 2307 and ANSC 2310 or prior departmental approval. Laboratory fee: $15

**ANSC 4385. Animal Clinical Pathology I. Change course title, hours, prerequisites and description.**  
3(2-3)  
Revised Description: Introduction to laboratory procedures and safety, in-depth study of hematology and urology and related chemistries with emphasis on laboratory procedures. Prerequisite: 9 semester hours of animal science or approval of instructor. Laboratory fee $50.

**ANSC 4401. Animal Radiology and Ultrasonography. New course.**  
4(3-3)  
Theory, principles, safety measures and application of radiology and ultrasonography within the field of veterinary medicine. Prerequisite: 16 hours of ANSC including ANSC 34XX
Veterinary Technology and ANSC 34XX Veterinary Office Management or prior departmental approval. Laboratory fee: $50

**ANSC 4405. Animal Anesthesia and Surgical Assistance. New course.** 4(2-4)
Application of surgical, obstetrical and anesthesia techniques, including use of equipment, determination of dosages, monitoring of anesthesia and aftercare of patients and necropsy techniques. Prerequisite: ANSC 3358-Clinical Animal Pharmacology and ANSC 4401-Animal Radiology and Ultrasonography or prior departmental approval.

**ANSC 4451. Animal Clinical Management. New course.** 4(2-4)
Common management practices and care of canines, felines, laboratory animals, and livestock in a clinical setting. Review of common diseases and sanitation practices encountered in the practice of veterinary medicine. Prerequisite: ANSC 3358-Clinical Animal Pharmacology and ANSC 4401-Animal Radiology and Ultrasonography or prior departmental approval.

**ANSC 4481. Animal Clinical Pathology II. New course.** 4(2-4)
In-depth study of urinalysis, cytology and microbiological techniques within a clinical setting including detailed survey of bacteriology, virology and mycology. Prerequisite: ANSC 4385 Animal Clinical Pathology I or prior departmental approval.

**ANSC 4487. Animal Parasitology. New course.** 4(2-4)
Common parasites and zoonotic diseases in domestic animals including control measures, pharmaceuticals, and public health importance. Prerequisite: ANSC 4385 Animal Clinical Pathology I or prior departmental approval.

**Department of Human Sciences**

**Proposal no. HSCI-11-U-16**

**Modify Fashion and Interiors Merchandising degree program.**
1. Add UNIV 1101 to freshman 1st; add UNIV 1102 to freshman 2nd.
2. Change HSCI 1300 3 credit hours in freshman 1st to HSCI 1300 1 hour credit; change total hours freshman 1st to 15 hours; change total hours freshman 2nd to 17.

**Proposal no. HSCI-11-U-17**

**Modify Family and Consumer Sciences Education degree program.**
1. Add UNIV 1101 to freshman 1st; add UNIV 1102 to freshman 2nd.
2. Change HSCI 1300 3 credit hours in freshman 1st to HSCI 1300 1 hour credit; change total hours freshman 1st to 15 hours; change total hours freshman 2nd to 17.

**Proposal no. HSCI-11-U-18**

**Modify Human Development and Family Studies degree program.**
1. Add UNIV 1101 to freshman 1st; add UNIV 1102 to freshman 2nd.
2. Change HSCI 1300 3 credit hours in freshman 1st to HSCI 1300 1 hour credit; change total hours freshman 1st to 14 hours; change total hours freshman 2nd to 16.
3. Change HSCI 2330 in sophomore 1st to HSCI 2350.
4. Add POLS 2301 to sophomore 1st.

Proposal no. HSCI-11-U-19
Modify Human Nutrition degree program.
1. Add UNIV 1101 to freshman 1st; add UNIV 1102 to freshman 2nd.
2. Change HSCI 1300 3 credit hours in freshman 1st to HSCI 1300 1 hour credit; change total hours freshman 1st to 15 hours; change total hours for freshman 2nd to 17.

COLLEGE OF ARTS AND SCIENCES

Proposal no. AS-11-U-01
Create a Writing Intensive requirement for graduation from the College of Arts and Sciences.
Students in the College of Arts and Sciences are required to pass with a grade of C or better at least one Writing Intensive course before graduation. Writing Intensive courses are advanced courses that use writing to deepen thinking about course content. Students will write a minimum of 5,000 words (approximately 20 pages of double-spaced typed text) in discipline-specific papers and assignments. Instructors will provide feedback on students’ writing assignments through the processes of drafting and revising at least one assignment. Such courses will require a prerequisite of English 1301 and 1302.

Proposal no. AS-11-U-03
Move the Applied Arts and Sciences, B.A.A.S. Program, from University College to the College of Arts and Sciences and modify list of programs in the College of Arts and Sciences.

Proposal no. AS-11-U-04
Replace college 1201 courses with UNIV 1101-1102.

Proposal no. AS-11-U-05
Delete A&S College 1201 courses.
ARTS 1201
BIOL 1201
SOCI 1201

Department of Language and Literature

Proposal no. ENGL-11-U-02
ENGL 1171. Information Literacy. New course. 1(1-0)
Concepts and practices associated with information literacy and research skills; the search for, use of, and documentation of information, especially electronic.
**Department of Mathematics**

*Proposal no. MATH-11-U-02*

Delete ALGE 0300 and ALGE 0301 from inventory.

**ALGE 0300. Developmental Algebra I.** 3 (3-1)

Designed to provide students with an introduction to algebra. Topics include operations using real numbers, solving linear equations, problem solving techniques, introduction to graphing linear equations, simplifying exponential expressions and polynomials and an introduction to factoring. Placement is based on analysis of student ACT/SAT, TSI assessment and/or placement test scores. Students must be concurrently enrolled in a mathematics laboratory.

**ALGE 0301. Developmental Algebra II.** 3(3-1)

Designed to provide students with more advanced algebraic skills necessary for success in college-level mathematics. Topics include a review of linear equations and problem solving techniques, rational expressions, graphing nonlinear equations and roots and radicals. Placement is based on analysis of student ACT/SAT, TSI and/or placement test scores. Students must be concurrently enrolled in a mathematics laboratory.

*Proposal no. MATH-11-U-03*

**MATH 0302. Developmental Algebra. New Course.** 3 (3-0)

The algebra skills necessary for success in college-level mathematics. Topics include real number operations, linear and quadratic equations, graphing linear and nonlinear equations, and simplifying polynomial, rational, and radical expressions. Course delivery is mainly through mathematics learning software. This course does not count toward any degree. Placement is based on analysis of student ACT/SAT, TSI, and/or placement test scores. Credit/Non-credit.

**Department of Physics and Geosciences**

*Proposal no. PHYS-12-U-01*

**Modify B.A. in Physics to include UNIV 1101-02.**

1. Change BIOL 1201 (Fr. 1st) to UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).

*Proposal no. PHYS-12-U-02*

**Modify B.S. in Physics to include UNIV 1101-02.**

1. Change BIOL 1201 (Fr. 1st) to UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).

*Proposal no. PHYS-12-U-03*

**Modify B.S. in Physics with Teaching Certification to include UNIV 1101-02.**

1. Change BIOL 1201 (Fr. 1st) to UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).

2. Move: Visual/performing arts (Fr. 2nd to So. 2nd).

*Proposal no. GEOL-12-U-01*

**Modify B.S. in Geology to include UNIV 1101-02, and correct an error.**

1. Change BIOL 1201 (Fr. 1st) to UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).
2. Drop ++ footnote and associated second + marker on last entry, Sr. 1st.

Proposal no. GEOL-12-U-02
Modify B.S. in Geology, Concentration in Geosciences, to include UNIV 1101-02, and correct an error.
  1. Change BIOL 1201 (Fr. 1st) to UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).
  2. Drop MATH 1348* (Fr. 2nd).

Proposal no. GEOL-12-U-03
Modify B.S. in Geology with Teaching Certification, to include UNIV 1101-02.
  1. Change BIOL 1201 (Fr. 1st) to UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).
  2. Move: ^Visual/performing arts (So. 1st to Fr. 1st) and HIST 1302 (Fr. 2nd to So. 1st).

COLLEGE OF BUSINESS ADMINISTRATION

Proposal no. GENB-11-U-01
Modify the Bachelor of Business Administration in General Business degree plan.
  1. Change BUAD 1201 to UNIV 1101 (Fr. 1st) and Kinesiology to UNIV 1102 (Fr. 2nd)
  2. Remove BUAD 1301 (Fr. 1st); BCOM 2304 option (Fr. 2nd) and move COMS 1315 (Fr. 2nd to Fr. 1st)
  3. Remove option of MATH 1324 (Fr. 1st) and drop MATH 1325 (Fr. 2nd);
  4. Remove CISA 3358; ECON 3331; MGMT 4329; MKTG 4363 (Sr. 1st); MGMT 4331 (Sr. 2nd)
  5. Restructure BCOM 3304 (Jr. 1st) as +BCOM 2206 (So. 1st), BCOM 2207 (So. 2nd) and add footnote +Business majors who earn less than a B in BCOM 2206 must take BCOM 2216.
  6. Replace CISA 1301 (So. 1st) with ISYS 2302 and move to So. 2nd
  7. Add BUAD 3100 and BUAD 3101 (Jr. 1st); Elective 3 and Nonbusiness Elective 3 (Sr. 2nd)
  8. Change MKTG 3361 (Jr. 1st) to MKTG 3324 (Sr. 1st); BLAW 3341 (Jr. 2nd) to BUAD 3211 and move to Jr. 1st; FINC 3337 to FINC 3321 (Jr. 2nd); MGMT 3321 (Jr. 2nd) to MGMT 3351 and move to Sr. 1st; ACCT. adv. 3 to Business, adv. 9 (Jr. 2nd); Business Elective 3 (Jr. 2nd) to Business, adv 9 and move to Jr. 1st; MGMT 4327 (Sr. 1st) to MGMT 3312 and move to Jr. 1st; MGMT 4325 to MGMT 4390 (Sr. 2nd); Business, adv 3 to Business, adv 5 (Sr. 2nd); Business, adv 3 (Sr. 2nd) to Business, adv 6 and move to (Sr. 1st)
  9. Move BUAD 2374 (So. 2nd to Fr. 2nd), Visual/performing arts (So. 2nd to Fr. 2nd);
     Nonbusiness Elective 3 (Jr. 1st to Sr. 1st), COMS 1315 (Fr. 2nd to Fr. 1st)

Department of Accounting and Finance

Proposal no. ACCT-11-U-01
ACCT 3330. International Accounting. Change course number. 3(3-0)
International dimensions of accounting, including patterns of accounting development found in other nations, worldwide accounting standards, and accounting problems associated with multinational corporate operations. Prerequisite: ACCT 2302.

Proposal no. ACCT-11-U-02
ACCT 3305. Fundamentals of Federal Income Taxation. Change course description. 3(3-0)
Survey of domestic and multinational provisions of federal income tax law. Practical experience including preparation of federal income tax forms. Students must participate in the VITA program. May not be counted toward an ACCT degree.

Proposal no. ACCT-11-U-03
ACCT 3338. Financial Statement Analysis. Change description. 3(3-0)
Analysis and interpretation of financial statements for the guidance of management, stockholders and other stakeholders. Prerequisite: ACCT 2302.

Proposal no. ACCT-11-U-04
ACCT 4305. Ethics for Accountants. Change course title. 3(3-0)
Application of ethical theory, philosophy and principles including the concepts of ethical reasoning, integrity, objectivity, independence and other core values. Prerequisite: senior standing.

Proposal no. ACCT-11-U-05
ACCT 3308. Income Tax Accounting. Change course number. 3(3-0)
Analysis of Federal income tax laws, emphasis being placed on the determination of net taxable income and preparation of income tax returns for individuals. Prerequisite: ACCT 2302.

Proposal no. ACCT-11-U-06
ACCT 4395. Special Study in Accounting. Change course credit hours and description. V:1-3
Study or research under supervision of instructor; small business audits. May be repeated for credit. Prerequisite: consent of instructor.

Proposal no. ACCT-12-U-05
ACCT 2301. Principles of Accounting I. (ACCT 2301) Remove prerequisites. 3(3-0)
Introduction to accounting with emphasis on the accounting cycle and financial accounting.

Proposal no. FINC-11-U-01
FINC 4331. Investments. Change course description. 3(3-0)
Principles governing the proper investment of personal and institutional funds; the characteristics of a sound investment and the analysis of different securities offered to investors. Topics include valuation of stocks and bonds, portfolio valuation, and mutual funds. Simulations allow the student to create and manage a portfolio of securities. Prerequisite: FINC 3321.

Proposal no. FINC-11-U-02
FINC 4332. Portfolio Management. Change course description. 3(3-0)
Analysis and evaluation of the decision-making process in investments. Asset valuation, portfolio management, and performance evaluation. Theoretical and analytical developments in security selection and portfolio management. Risk measurement and risk reduction through portfolio construction. Analysis of derivative securities, including options and futures contracts. Student-directed simulated portfolio management. Prerequisite: FINC 4331.

Proposal no. FINC-11-U-03

Proposal no. FINC-11-U-04

Proposal no. FINC-11-U-05
FINC 4362. Financial Planning and Capital Budgeting. Change course title. 3(3-0) Corporate analysis of valuations and investments, capital budgeting and financing, credit and debt management, risk management and taxation. Short-term planning including cash and working capital management. Long-term planning including debt and equity management. Prerequisite: FINC 3337. Short banner title: [Financial Planning and Capital]

Proposal no. FINC-11-U-06
FINC 4364. Business Forecasting. Change course description. 3(3-0) Techniques for statistically sound business forecasting. Graphical analysis and concepts such as seasonality, trends and cycles. Advanced forecasting using ARMA modeling as well as regression. Extensive use of appropriate computer software. Prerequisite: BUAD 3355.

Proposal no. FINC-11-U-07
FINC 4395. Special Problems in Finance. Change course credit hours and description. V:1-3 Special studies in finance. May be repeated for credit. Prerequisite: consent of the instructor.

Proposal no. FINC-11-U-08
Modify degree plan for Bachelor of Business Administration in Finance.
  1. Change BUAD 1101 to UNIV 1101 (Fr. 1st)
  2. Change Kinesiology to UNIV 1102 (Fr. 2nd)

Department of Information Systems

Proposal no. ISYS-11-U-01
ISYS 4306. Data Communication & Networking I. Change course title, description and prerequisites. 3(3-0)
Applications requiring data communication, internal and external influences on data communication systems and service providers, data transmission, standards and architectures, management of network design and operation, local area networks, and future issues. Prerequisite: ISYS 2302 or equivalent. Short Banner title: [Data Comm & Networking I].

Proposal no. ISYS-11-U-02
ISYS 4308. Data Communications & Networking II. Change course title, description and credit hours. 3(3-0)
Installation, administration, interoperability and security issues associated with the implementation of typical business networks. Prerequisite: ISYS 4306. Short Banner title: [Data Comm & Networking II].

Proposal no. ISYS-11-U-03
ISYS 3358. Business Information Systems. Change course prerequisites. 3(3-0)
A comprehensive study of the use of information technology as an organizational resource, including the implementation of disciplined processes and management development to effectively exploit the power of modern information technology. Prerequisite: ISYS 2302, MGMT 3312.

Proposal no. ISYS-11-U-04
ISYS 3364. Programming in Visual BASIC.NET. Change course prerequisites. 3(3-0)
Fundamentals and techniques of programming for business applications using Visual Studio.NET. Prerequisite: ISYS 2302.

Proposal no. ISYS-11-U-05
ISYS 3302. Business Applications Using C++.NET. Change course number and prerequisites. 3(3-0)
Concepts and applications of the C++ programming language for business and industry using Visual Studio.NET. Prerequisite: ISYS 2302.

Proposal no. ISYS-11-U-06
Research in selected fields of computer information systems. May be repeated for credit. Prerequisite: consent of instructor.

Proposal no. ISYS-11-U-07
Modify degree plan for Bachelor of Business Administration in Computer Information Systems.
1. Change BUAD 1101 to UNIV 1101 (Fr. 1st)
2. Remove Kinesiology and add UNIV 1102 (Fr. 2nd)
3. Replace ISYS elective (Sr. 1st) with ISYS 4358.

Department of Management and Marketing
Proposal no. BCOM-10-U-02

BCOM 3304. Business Communication. **Delete course.** 3(3-0)
Principles of business communication through letters and reports. Clear, accurate and forceful writing; practical psychology; and business reports with implication for international business. Prerequisite: ENGL 1301 and ENGL 1302.

Proposal no. MGMT-11-U-02

MGMT 4395. Special Problems in Management. **Change course hours and description.** V:1-3
Special studies in management. May be repeated for credit. Prerequisite: consent of the instructor.

Proposal no. MGMT-11-U-03

Modify degree plan for Bachelor of Business Administration in Management.
1. Change BUAD 1101 to UNIV 1101 (Fr. 1st)
2. Change Kinesiology to UNIV 1102 (Fr. 2nd)

Proposal no. MGMT-11-U-04

Add new degree plan concentration, Management – Materials and Supply Chain Management, for Bachelor of Business Administration in Management.
1. Change BUAD 1101 to UNIV 1101 (Fr. 1st)
2. Change Kinesiology to UNIV 1102 (Fr. 2nd)
3. Change MGMT Elective to MGMT 4348 (Jr. 2nd)
4. Change MGMT Electives 6 to MGMT 4324 and MGMT 4358 (Sr. 1st)
5. Change MGMT Electives 5 to MGMT 4265 and MGMT 4335 (Sr. 2nd)

Proposal no. MGMT-11-U-05

Add new degree plan concentration, Management – Human Resources, for Bachelor of Business Administration in Management.
1. Change BUAD 1101 to UNIV 1101 (Fr. 1st)
2. Change Kinesiology to UNIV 1102 (Fr. 2nd)
3. Change MGMT Elective to MGMT 4348 (Jr. 2nd)
4. Change MGMT Electives 6 to MGMT Elective 3 and add MGMT 4350 (Sr. 1st)
5. Change MGMT Electives 5 to MGMT Elective 2 and add MGMT 4358 (Sr. 2nd)

Proposal no. MKTG-11-U-03

MKTG 4335. Supply Chain Management. **Change course title.** 3(3-0)
Purchasing; supplier relationship and supply chain management; inbound and outbound logistics. Role of technology in managing the supply chain. International logistics. Prerequisite: MKTG 3324.

Proposal no. MKTG-11-U-04

MKTG 4350. Consumer Behavior. **Change course title.** 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. Prerequisite: MKTG 3365.

Proposal no. MKTG-11-U-05
MKTG 4390. Marketing Management and Analytics. Change course title. 3(3-0)
Capstone Marketing course for majors. Marketing functions in the firm and marketplace from the viewpoint of the marketing manager. Concepts and analytical tools used by marketing managers. Prerequisites: MKTG 3324, MKTG 3364, and MKTG 4350; senior standing. Short Banner title:[Marketing Mgmt and Analytics]

Proposal no. MKTG-11-U-06
MKTG 4395. Special Problems in Marketing. Change course hours and description. V:1-3
Special studies in marketing. May be repeated for credit. Prerequisite: consent of instructor.

Proposal no. MKTG-11-U-07
Modify degree plan for Bachelor of Business Administration in Marketing.

1. Change BUAD 1101 to UNIV 1101 (Fr. 1st)
2. Change Kinesiology to UNIV 1102 (Fr. 2nd)

COLLEGE OF EDUCATION AND HUMAN PERFORMANCE

Department of Health and Kinesiology

Proposal no. EDHL-11-U-01
Correct typographical errors and outdated information in the catalog, including but not limited to the removal of references to the B.S. in Community Health.

Proposal no. EDKN-10-U-10
Modify the B.S. in Kinesiology degree (Sport Management track)

1. Change the name of the track from Sport Management to Sport Business.
2. Replace BUAD 1301 (Fr. 1st) with BUAD 1101.
3. Remove EDKN 1301 (Fr. 1st).
4. Move EDKN 2330 (So. 1st) and ^Visual/performing arts (So. 1st) to Fr. 1st.
5. Change Math 1324 (Fr. 2nd) to MATH 1314 or MATH 1324.
6. Replace EDKN Activity or EDHL 2124 (Fr. 2nd) with EDKN 2130.
7. Move ^Literature/philosophy (So. 1st) to Jr. 2nd.
8. Add PSYC 2301, BCOM 2206 or BCOM 2207, COMM 2311, and EDKN 2130 to So. 1st.
9. Move ECON 2301 (So. 2nd) to Jr. 1st.
10. Replace ^Global Learning (So. 2nd) with EDKN 2335, and move to Jr. 1st.
11. Move EDKN 2333 (Jr. 1st) to So. 2nd.
12. Add COMM 2309 to So. 2nd.
13. Remove ECON 2302, EDKN 2324 or EDKN 3332, and ^Prof. Emphasis from Jr. 1st.
14. Add EDHL 2124 and EDKN 3390 to Jr. 1st.
15. Move EDKN 3345 (Jr. 2nd) to Jr. 1st.
16. Move EDKN 3355 (Jr. 2nd) to Sr. 1st.
17. Remove FINC 3337 and *Prof. Emphasis from Jr. 2nd.
18. Replace MGMT 3311 (Jr. 2nd) with MGMT 3322.
19. Replace MKTG 3361 (Sr. 1st) with MKTG 3324 and move to Jr. 2nd.
20. Add EDKN Activity, EDKN 4328, and EDKN 4336 to Jr. 2nd.
21. Move EDKN 4345 (Sr. 1st) to Sr. 2nd.
22. Replace EDKN 3350 or EDKN 3352 (Sr. 2nd) with EDKN 3352 and move to Sr. 1st.
23. Remove *Prof. Emphasis and *Prof. Emphasis from Sr. 1st.
24. Add EDKN 3390 to Sr. 1st.
25. Remove *Prof. Emphasis and *Prof. Emphasis from Sr. 1st.
26. Add COMJ 4306 or COMM 4308, and EDKN 4350 to Sr. 2nd.
27. Remove footnote giving options for *Prof. Emphasis.

Proposal no. EDKN-10-U-12
Modify the B.S. in Kinesiology-Exercise Science
1. Replace EDKN 1301 (Fr. 1st) with EDKN 1305 Intro to Exercise Science.

Proposal no. EDKN-10-U-13
Modify the B.S. in Kinesiology-Exercise Science (Pre-Physical Therapy Option)
1. Replace EDKN 1301 (Fr. 1st) with EDKN 1305 Intro to Exercise Science.

Proposal no. EDKN-10-U-14
EDKN 4328. Internship. Change course title, description and prerequisites. 3(3-0)
The student and the university supervisors will develop a contractual agreement for a minimum of 120 clock hours of specific learning experiences on or off campus. Course may be repeated for credit. Prerequisites: EDKN 4401 or EDKN 2333, and instructor consent.

Proposal no. EDKN-10-U-15
Modify Kinesiology minor:
1. In the Physical Education Concentration, correct EDN 2110 (typo) to EDKN 2110.
2. In the Exercise Science Concentration, replace EDKN 1301 with EDKN 1305*.
3. In the Exercise Science Concentration, replace EDKN 4332 with EDKN 4320**.
*EDKN 1305: Introduction to Exercise Science.
**EDKN 4332: Introductory Research Methods.

Proposal no. EDKN-10-U-16
EDKN 2330. Introduction to Sport Business. Change course title, description and prerequisites. 3(3-0)
Introduction to the sports industry, career opportunities involving sport and the economic impact of sports in America, including theoretical and applied foundations of sport business.

Proposal no. EDKN-10-U-17
EDKN 2333. Sport Marketing and Promotions. **Change course prerequisites.** 3(3-0)
Investigation of the complex responsibilities of the sport promotion specialist that unfold through promotions and sales. Advertising, publicity, sponsorship, atmospherics, incentives, personal contact, community relations, licensing and technology in the sport industry.

*Proposal no. EDKN-10-U-18*

EDKN 3320. Motor Development/Motor Learning. **Change course prerequisites.** 3 (2-3)
Physical factors that influence growth, maturation and aging; process underlying perceptual-motor performance and the interpretation and applications of motor research to human movement. Includes required laboratory experiences. Prerequisite: junior standing.

*Proposal no. EDKN-10-U-19*

EDKN 3332. Program Development/Management in Fitness Industries. **Change course prerequisites.** 3(3-0)
Organizational development and management in corporate, commercial and institutional fitness industries. Prerequisite: Junior standing.

*Proposal no. EDKN-10-U-20*

EDKN 3345. Measurement and Evaluation in Kinesiology. **Change course prerequisites.** 3(2-3)
Use and function of the various tests in kinesiology, together with the purpose, scope and techniques of test construction will be analyzed. Sufficient statistical techniques necessary for adequate manipulation and interpretation will be reviewed. Required laboratory experiences. Prerequisites: MATH 1314 or MATH 1324, and one of the following: EDKN 1301, EDKN 1305, EDKN 2330 or EDHL 2325.

*Proposal no. EDKN-10-U-21*

EDKN 3352. Sport and Exercise Psychology. **Change course prerequisites.** 3(3-0)
Social and psychological factors related to sport and exercise participation, active living and injury rehabilitation. Topics include socialization into and through sport and exercise; feedback, reinforcement and expectation effects; moral development; competition and competitive stress; self-perceptions; motivation and mental skills training. Prerequisite: Junior standing.

*Proposal no. EDKN-10-U-22*

EDKN 3355. Sport and the Law. **Change course prerequisites.** 3(3-0)
Legal and ethical dilemmas facing those in sport. Legal principles and judicial opinions in cases involving organized sport. Prerequisite: Junior standing.

*Proposal no. EDKN-10-U-23*

EDKN 4315. Complex Psychomotor Skills for Children. **Change course description and prerequisites.** 3(3-0)
Motor development activities for children. Grouping principals and techniques for selecting activities appropriate to various age groups and developmental levels. Prerequisites: EDKN 2110, EDKN 2112, EDKN 2114 and junior standing.

Proposal no. EDKN-10-U-24
EDKN 4329. Senior Seminar in Exercise Science. Change course prerequisites. 3(3-0)
The capstone course for Kinesiology-Exercise Science, to be taken in the senior year. The course will explore the current status of and current issues in careers in exercise science. Issues will include but not be limited to professional ethics, social impact and career options. Prerequisites: senior standing and instructor consent.

Proposal no. EDKN-10-U-25
EDKN 4345. Sport Economics and Finance. Change course title, description and prerequisites. 3(3-0)
Cases from facility construction, marketing, sport law and sponsorship illustrating the integral role of economics and finances in the daily administration of the sport organization. How the disbursement, receipt and use of money can catalyze growth in the sport industry. Prerequisite: junior standing.

Proposal no. EDKN-10-U-26
EDKN 4401. Exercise Testing and Prescription. Change course prerequisites. 4(3-1)
Design and implementation of exercise programs for healthy and special populations based upon appropriate screening and evaluation procedures. Laboratory required. Prerequisites: EDKN 3326 and senior standing.

Proposal no. EDKN-11-U-01
Modify Kinesiology minor to include a Sport Business concentration, and reflect change to EDKN 3326 (see EDKN-11-U-02).

p. 122
Kinesiology: Coursework leading to four minor concentrations is offered: physical education, coaching, exercise science, and sport business. Consult the Department of Health and Kinesiology section of the catalog for concentration specific requirements.

p. 254
Kinesiology Minor
Non-kinesiology majors may choose to minor in kinesiology. Students may select from one of the following concentrations based on their specific interests:

Kinesiology (Physical Education Concentration) (21 credit hours) = EDED 3341; EDKN 1301; EDKN 2110; EDKN 2112; EDKN 2114; EDKN 3320; EDKN 4315; and EDKN 4342. Declaration of the minor with this concentration is restricted to students pursuing a teacher certification degree in another discipline.
**Kinesiology (Coaching Concentration)** (18-19 credit hours) = EDKN 1301; EDKN 1308; EDKN 2324; EDKN 3320; EDKN 3352; and EDKN 3436 or EDKN 4325. Note: Biology prerequisites for EDKN 3436 or EDKN 4325 must also be met.

**Kinesiology (Exercise Science Concentration)** (19-20 credit hours) = EDKN 1305; EDKN 3352; EDKN 3345; EDKN 3436; EDKN 4325; and EDKN 4329, EDKN 4320 or EDKN 4401. Note: Biology prerequisites for EDKN 3436 and EDKN 4325 must also be met.

**Kinesiology (Sport Business Concentration)** (18 credit hours) = EDKN 2330; EDKN 2333; EDKN 3355; EDKN 3390 or 4328; EDKN 4345; and EDKN 4350.

**Proposal no. EDKN-11-U-02**

**EDKN 3436.** Basic Physiology of Exercise. **Change course number and hours.** 4 (3-2) Physiology as applied to exercise and human performance. How the systems of the body respond to both acute and chronic exercise training. Includes required laboratory experiences. Prerequisite: BIOL 2401; credit or registration in BIOL 2402; junior standing.

**Proposal no. EDKN-11-U-03**

**Modify the B.S. in Kinesiology - Exercise Science:**

1. Replace EDKN 1300 (Fr. 1<sup>st</sup>) with UNIV 1101 (Fr. 1<sup>st</sup>) and UNIV 1102 (Fr. 2<sup>nd</sup>).
2. Change EDKN 3326 (Jr. 1<sup>st</sup>) to EDKN 3436.
3. Move EDHL 1254 Fr. 2<sup>nd</sup> to Fr. 1<sup>st</sup>; and EDKN Aquatics Jr. 1<sup>st</sup> to Fr. 2<sup>nd</sup>.

**Proposal no. EDKN-11-U-04**

**Modify the B.S. in Kinesiology - Exercise Science/Pre-Physical Therapy Option:**

1. Replace EDKN 1300 (Fr. 1<sup>st</sup>) with UNIV 1101 (Fr. 1<sup>st</sup>) and UNIV 1102 (Fr. 2<sup>nd</sup>).
2. Change EDKN 3326 (Jr. 1<sup>st</sup>) to EDKN 3436.
3. Move EDHL 1254 (Jr. 1<sup>st</sup>) to Fr. 1<sup>st</sup>.

**Proposal no. EDKN-11-U-05**

**Correct typographical errors and modify the B.S. in Kinesiology (Sport and Leisure Studies):**

1. Correct typographical errors (see EDKN-08-U-12):
   a. change EDN Recreation (So. 1<sup>st</sup>) to EDKN Recreation
   b. change EDKN 3346 (Jr. 1<sup>st</sup>) to EDKN 3345
   c. change EDKN 2330 (Fr. 2<sup>nd</sup>) to EDKN 1308 or EDKN 2330, see also #4 below.
   d. change Supporting Field (Sr. 1<sup>st</sup>) to Supporting Field, adv. (once)
   e. change footnote EDHL advanced electives select from EDKN 3320, EDKN 3332,
   f. EDKN 3350, EDKN 3355, EDKN 4324, EDKN 4325, EDKN 4342, EDKN 4345 to EDHL advanced electives select from any advanced EDHL course.
   g. remove italics for footnotes.
2. Replace EDKN 1300 (Fr. 1<sup>st</sup>) with UNIV 1101 (Fr. 1<sup>st</sup>) and UNIV 1102 (Fr. 2<sup>nd</sup>).
3. Change EDKN 3326 (Jr. 1<sup>st</sup>) to EDKN 34XX [3426] (see EDKN-11-U-02).
4. Move EDKN 1308 or EDKN 2330 (Fr. 2<sup>nd</sup>, see #1c above) to Fr. 1<sup>st</sup>, EDKN Recreation (So. 1<sup>st</sup>) to Fr. 2<sup>nd</sup>, and EDKN Fitness (Jr. 1<sup>st</sup>) to So. 1<sup>st</sup>.
**Proposal no. EDKN-11-U-06**

**Modify the B.S. in Kinesiology (Sport Business):**
1. Replace EDKN 1300 (Fr. 1st) with UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).
2. Change EDKN 3326 or EDKN 4325 (Sr. 1st) to EDKN 34XX [3426]. (see EDKN-11-U-02)
3. Move EDKN 1308 (Fr. 2nd) to Fr. 1st.
4. Move EDKN Activity (Jr. 2nd) to Fr. 2nd; move EDKN 2124 (Jr. 1st) to So. 1st.
5. Change hours for So 1st from 14 to 15; change hours Jr. 1st from 16 to 15; change hours Jr. 2nd from 16 to 15.

**Proposal no. EDKN-11-U-07**

**Modify the Kinesiology - EC-12 Physical Education with Teacher Certification:**
1. Replace EDKN 1300 (Fr. 1st) with UNIV 1101 (Fr. 1st) and UNIV 1102 (Fr. 2nd).
2. Change EDKN 3326 (Jr. 1st) to EDKN 34XX [3426, see Proposal EDKN-11-U-02].
3. Move COMS 1311, 1315, or 2335 (Fr. 2nd to Fr. 1st), Sociology/Psychology (So. 2nd to Fr. 2nd) and Supporting Field (Jr. 1st to So. 2nd).

**Proposal no. EDKN-11-U-08**

**EDKN 3353. Applied Sport Psychology.** New course. 3(3-0)
Social and psychological factors related to exercise participation and peak sport performance. Prerequisites: EDKN 3352, PSYC 3301, and junior standing.

**Proposal no. EDKN-11-U-09**

**EDKN 4353. Psychology for Sports Coaches.** New course. 3(3-0)
Understanding and applying psychological principles as they relate to sports coaching and athletic performance. Prerequisites: EDKN 3352, PSYC 2302, and junior standing.

**Department of Teacher and Bilingual Education**

**Proposal no. EDRG-11-U-01**

**EDRG 4330. Classroom Reading Assessment and Remediation.** Change course title and description. 3(3-4)
Includes methods of assessment, both formal and informal, with attention given to special needs of the learning disabled and gifted readers. Development of diagnostic/prescriptive case study required. Lab experience is required. Prerequisites: EDRG 3314 and EDRG 3344. Short Banner Title: [Clrm Reading Assess/Remed].

**FRANK H. DOTTERWEICH COLLEGE OF ENGINEERING**

**Department of Civil and Architectural Engineering**

**AEEN 3337. Electrical Systems for Buildings.** New course. 3(3-0)
An introduction to electrical systems for buildings and their applications, including electrical system components, load calculation, and basic design principles. Prerequisite: EEEN 3331. Short banner title: Electrical Systems-Buildings]
Department of Chemical and Natural Gas Engineering

Proposal no. NGEN-11-U-02
NGEN 3322. Fundamentals of Reservoir Engineering. Reinstatement of course and change description and prerequisites. 3(2-3)
Physical properties of petroleum reservoir rocks, lithology, porosity, fluid saturations, permeability and capillary characteristics as they relate to the production of oil and gas. Properties of hydrocarbon systems. Material balance methods. Flow of fluids in porous media. Prerequisites: Credit or registration in CHEN/NGEN 3392, GEOL 1303/1103 and CHEM 2421. Short Banner title: [Funds of Reservoir Engg]

Proposal no. NGEN-11-U-03
NGEN 3392. Fluid Transport Phenomena. Reinstatement of course and change prerequisites. 3(3-0)
Fundamentals of momentum transport including fluid statics, flow of compressible and incompressible fluids, pumps, turbines, and compressors, with computer applications. Prerequisite: MATH 3320; credit or registration in MEEN 2355 or MEEN 2302. (Credit may not be obtained in both NGEN 3392 and CHEN 3392.)

Proposal no. NGEN-11-U-04
NGEN 3493. Natural Gas Drilling Engineering. Reinstatement of course and change course description. 4(3-3)
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. Prerequisites: NGEN 3322 and NGEN/CHEN 3392. Short Banner title: [Natural Gas Drilling Engg]

Proposal no. NGEN-11-U-05
NGEN 4279. Unit Operations Laboratory. Reinstatement of course and remove lab fee. 2(0-6)
Selected laboratory experiments in heat and mass transfer. Prerequisite: CHEN 4389. (Credit may not be obtained in both NGEN 4279 and CHEN 4279.)

Proposal no. NGEN-11-U-06
NGEN 4335. Special Problems. Reinstatement of course. V:1-3
Individual solution of selected problems in natural gas engineering conducted under direct supervision of a faculty member. May be repeated for up to 6 semester hours. Prerequisite: senior standing.

Proposal no. NGEN-11-U-07
NGEN 4375. Natural Gas Distribution. New course. 3(3-0)
Pipeline and compressor station design. Pipeline integrity and environmental issues associated with pipeline placement and design. Prerequisite: NGEN/CHEN 3392.

Proposal no. NGEN-11-U-08
NGEN 4478. Natural Gas and Hydrocarbon Measurement. New course. 4(3-3)
Theory and practice of measurement of hydrocarbon gas and liquid properties and flow. Prerequisites: NGEN/CHEN 3392 and NGEN 4375

Proposal no. NGEN-11-U-09
NGEN 4383. Natural Gas Processes. Reinstall course. 3(3-0)
The design, operation and economics of systems for the utilization of hydrocarbon gases and liquids, the concentration of their components by absorption and fractionation procedures. Use of computer aided design and economic evaluation of facility designs. Prerequisite: CHEN 4389. (Credit may not be obtained in both NGEN 4383 and CHEN 4383.)

Proposal no. NGEN-11-U-10
NGEN 4387. Seismic Interpretation and Well-Logging. Reinstall course and change title and description. 3(3-0)
Theory and methods of modern seismic and well log interpretation. Prerequisite: NGEN 3493 or GEOL 3431. Short Banner title: [Seismic Interp & Well-Logging]

Proposal no. NGEN-11-U-11
NGEN 4396. Natural Gas Production, Testing, and Evaluation. Reinstall course and change number of hours, course number, title and course description. 3(3-0)
Theory, design and methods of gas well testing and production forecasting. Estimating the value of gas and oil properties. Environmental issues and professional responsibility. Prerequisites: NGEN 3322 and NGEN/CHEN 3392. Short Banner Title: [Natural Gas Production]

Proposal no. NGEN-11-U-12
NGEN 4398. Capstone Design Project. New course. 3(2-3)
In teams, students complete significant design projects that include two or more aspects of natural gas engineering. Prerequisite: Student has 6 or fewer credit hours of NGEN courses to complete in subsequent terms.

Department of Electrical Engineering and Computer Science

Proposal No. CSEN-11-U-01
Change course title.
CSEN 4314. Database Systems. 3(3-0)

Proposal No. CSEN-11-U-03
Change course title and description.
CSEN 2328. Data Structures and Algorithms. 3(3-0)
Specification and implementation of data types and associated algorithms: lists, stacks, queues, trees, hashing, priority queues, sorting and graphs. Prerequisite: CSEN 2304.
Proposal No. CSEN-11-U-04
New course.
CSEN 2306. Object-Oriented Programming. 3(3-0)
Fundamental features of C++ programming, introduction to objects and classes, major concepts of object-oriented programming such as data abstraction, encapsulation, polymorphism and inheritance. Prerequisite: CSEN 2304.

Proposal No. CSEN-11-U-08
Delete course.
CSEN 4361. System Software. 3(3-0)

Proposal No. CSEN-11-U-09
New course.
CSEN 4340. Computer Security. 3(3-0)
Theory and practice of computer security. Cryptographic tools used to provide security, such as shared key encryption, public key encryption, key exchange, and digital signature, with application to security in computer programs, operating systems, database management systems and networks. Prerequisite: CSEN 4320.

Proposal No. CSEN-11-U-10
Modify degree requirements for Bachelor of Science in Computer Science.
1. Replace EEEN 2323 (So 2) with CSEN 2306 (Fr 2).
2. Replace EEEN 3334 (Jr 1) with CSEN 4315 (Jr 1).
3. Replace Approved Elective (Jr 1) with STAT 1342 (So 2).
4. Move the following courses: CSEN 2328 (Fr 2 to So 2), EEEN 2340 (So 1 to Jr 1), CSEN 2310 (So 2 to So 1) and CSEN 4320 (Sr 2 to Sr 1).
5. Add CSEN 4340 (Sr 2).
6. Remove CSEN 4361 (Sr 1).
7. Replace EEEN 1201 (Fr 1) with UNIV 1101 (Fr 1) and UNIV 1102 (Fr 2).

Proposal No. CSEN-11-U-11
Add information for the option of choosing Computer Science as minor. (Several location in the catalog.)

Proposal no. CSEN-11-U-13
CSEN 2304. Introduction to Computer Science. Change course prerequisites. 3(3-0)
Introduction to computer systems, problem solving methods and algorithm development. Structured programming using a programming language such as C. Designing, coding, debugging and documenting programs using techniques of software development cycle. Prerequisite: Credit or registration in MATH 1314.

Department of Mechanical and Industrial Engineering

Proposal no. MEEN-11-U-01
MEEN 3392. Fluid Mechanics. New course. 3(3-0)
Basic properties of fluids. Fluid statics. Fluids in motion. Continuity, energy, and linear and angular momentum equations in integral and differential forms. Incompressible viscous flow; Navier-Stokes equations, parallel flow, pipe flow, and the Moody diagram. Introduction to laminar and turbulent boundary layers and free surface flows. Prerequisites: MATH 3320 and credit or registration in MEEN 2302.

Proposal no. MEEN-11-U-02
Modify B.S. in Mechanical Engineering
Proposed changes:
1. Replace CHEN 3392 with MEEN 33XX in Junior 1st.
2. Substitute a better line break on the heading.

Proposal no. MEEN-11-U-03
Add Nuclear Engineering minor to the MEEN program and College of Engineering recognized minors.

Proposal no. MEEN-11-U-04
Modify degree plan for Bachelor of Science in Mechanical Engineering.
Add five new engineering electives (in the footnotes, in appropriate order):
MEEN 3398
MEEN 4395
MEEN 4396
MEEN 4397
EVEN 3399

Proposal no. MEEN-11-U-05
MEEN 3398. Computer Applications in Nuclear Engineering. New course. 3(3-0)
Applications of computer software to solve nuclear engineering problems; nuclear data and cross-section libraries; deterministic and stochastic models; single and multi-objective optimization; applied nuclear engineering codes. Prerequisites: junior standing. Short Banner title:[Comp App in Nuclear Engr]

Proposal no. MEEN-11-U-06
MEEN 4395. Thermal Hydraulics of Nuclear Reactors. New course. 3(3-0)
Thermal hydraulics of nuclear reactor cores; two-phase flow regimes, the boiling curve, dry-out phenomena, natural circulation in reactor core, transients and instabilities of two-phase flow. Prerequisites: MATH 3320, PHYS 2325, MEEN 3392 (or CHEN 3392). Short Banner title: [Therm Hydr of Nuclear Reactors]

Proposal no. MEEN-11-U-07
MEEN 4396. Nuclear Safety and Reliability. New course. 3(3-0)
Introduction to nuclear safety systems and licensing principles. Design criteria and regulations. Deterministic and probabilistic, and reliability analysis. Radiological consequences and risk
assessment. Design-based accidents and severe-accident management. Implications for advanced reactors. Prerequisites: senior standing.

Proposal no. MEEN-11-U-08
MEEN 4397. Introduction to Nuclear Power Plants. New course. 3(3-0)
Introduction to basic topics in the analysis and design of nuclear power plants. Prerequisites: PHYS 2326, MATH 3320. Short Banner title: [Intro to Power Plants]