



UNDERGRADUATE CURRICULUM REVISIONS
Effective, Fall 2010

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

Department of Agronomy and Resource Sciences

AGRI 2372. Global Agricultural Society, 3(3-0). **New course.** The role of food agriculture in a global society. Critical issues affecting world food production across diverse cultures. *Proposal no. AGRI-09-C-1 (will be a Global Learning course - only if approved by General Education Committee)*

COLLEGE OF ARTS AND SCIENCES

Department of Art

Proposal no. ARTS-10-U-05 (Effective Spring 2011)

ARTS 2303. History of Architecture, 3(3-0). **New course.** Survey course in the history of Architecture, concentration on modern to contemporary expressions. Prerequisite: ARTS 1303 or ARTS 1304. Prerequisite: ARTS 1303 or ARTS 1304.

Department of Biological and Health Sciences

Proposal no. CSDO-09-U-1

CSDO 4325. Clinical Methodologies. **Changed course number and prerequisites.** (3-1.5) Designed to acquaint the student with clinical methods in speech-language pathology before beginning clinical practice. Topics include target behaviors, treatment methods and controlling and maintaining target behaviors. Prerequisites: CSDO 2325, CSDO 3305, CSDO 3333, CSDO 4321, and CSDO 4329; 2.75 overall GPA and 3.0 GPA for CSDO courses required.

Department of Mathematics

Proposal no. MATH-08-U-09

MATH 3352. Applied Fundamentals of Mathematics, 3(3-0). **New course.** Applied projects in selected areas of mathematics, such as number systems, systems of operations, proportional reasoning, probability, statistics, measurement, and geometry. Emphasis on understanding pedagogical content for pre-service teachers in mathematics. Planning, implementing, and assessing mathematics activities during a two-week summer camp for area youth. Prerequisite: MATH 2413.

Effective Spring 2011

MATH 4371. Laplace Transformations and its Applications, 3(3-0). **Reinstated Course.** An introduction to the theory of the Laplace Transformation. Applications to the solution of ordinary and partial differential equations, integral equations, difference equations and integro-differential equations. An introduction to other types of integral transformations. Prerequisite: MATH 3315 and MATH 3320.

Proposal no. MATH-08-U-02

MATH 4390. Selected Topics in Mathematics, 3(3-0). **Changed course number from MATH 3390.** Different topics will be covered at varying times. May be repeated for credit with consent of instructor. Prerequisite: 3 semester hours of advanced mathematics.

Proposal no. MATH-08-U-5

MATH 4399. Capstone Experience in Mathematics, 3(3-0). **New course.** Designed to integrate mathematical standards and skills of mathematics majors. Students will demonstrate their ability to organize and synthesize mathematical knowledge; and design, implement, and present an advanced project in mathematics or mathematics education. Prerequisite: Senior standing in mathematics.

Department of Music

Proposal no. MUSI-10-U-8

MUSI 1162. Diction I. (MUSI 1162), 1(1-1). **Change title and description.** Studies and practice in diction of Latin, Italian, and English languages through use of vocal literature of the 17th century through the present.

Proposal no. MUSI-10-U-9

MUSI 1165. Diction II, 1(1-1). **New course.** Studies and practice in diction of Spanish, German, and French languages through use of vocal literature of 17th century through the present.

Department of Physics and Geosciences

Proposal no. PHYS-10-U-1

PHYS 1373. Preparatory Physics, 3(3-0). **New course.** Topics needed to succeed in College Physics or University Physics. Problem solving using basic techniques of algebra and trigonometry. Topics include vector mechanics, linear and two-dimensional kinematics, and Newtonian dynamics.

COLLEGE OF BUSINESS ADMINISTRATION

Department of Accounting and Finance

Proposal no. ACCT-09-U-02

ACCT 3314. Cost/Managerial Accounting, 3(3-0). **Changed course prerequisites.**

Financial cost accounting - job order and process cost procedures. Managerial cost accounting: planning, controlling and specific project decisions. Prerequisite: ACCT 2302.

Proposal no. FINC-09-U-01

FINC 3338. Financial Statement Analysis, 3(3-0). **Change course description.**

Analysis and interpretation of financial statements for the guidance of management, stockholders, and other stakeholders. Establishment of firms' business profiles; quality of earnings issues; and stock valuation. Credit may not be received for both FINC 3338 and ACCT 3338.

Department of Information Systems

Proposal no. CISA-09-U-03

CISA 1301. Personal Computer Applications (COSC 1301, BCIS 1301), 3(3-0). **Changed course description and title.** Introduction to personal computer terminology, operations and application including word processing, spreadsheets, presentation graphics, databases, the Internet and e-mail utilization. Open to all majors.

Proposal no. CISA-09-U-02

CISA 1302. Personal Computer Applications II, 3(3-0). **Deleted course.**

Proposal no. CISA-09-U-01

CISA 4308. Telecommunications II, 3(3-0). **Changed course lecture/lab hours.**

Installation, administration, interoperability and security issues associated with the implementation of typical business telecommunication systems. Prerequisite: CISA 4306.

Department of Management and Marketing

Proposal no. BUAD-09-U-01

BUAD 1201. Principles in Business Administration., 2(2-0). **Changed course description.**

Academic orientation and career counseling for the study of Business Administration. A discussion of the skills and personal characteristics which contribute to the success of individuals pursuing a career in the professional administration of business enterprise.

Proposal no. BUAD-09-U-01

BUAD 1301. Introduction to Business Administration, 3(3-0). **Changed course description.**

An overview of the American business sector with emphasis on social responsibility and ethical behavior. The environment and substance of administration in economic system. Open to freshman and sophomores only.

Proposal no. PHIL-09-U-02

PHIL 3313. Applied Ethics, 3(3-0). **New course.** Introduction to contemporary moral issues: corporate responsibility, abortion, capital punishment, drug legalization, animal rights, gay marriage, economic equality, free speech, etc.

Proposal no. PHIL-09-U-01

PHIL 4394. Special Problems in Philosophy, 3(3-0). **New course.** Special studies in philosophy. Course may be repeated for credit, if different topic is offered.

FRANK H. DOTTERWEICH COLLEGE OF ENGINEERING

Department of Architectural and Civil Engineering

Proposal no. CEEN-09-U-01

Modified degree plan for Bachelor of Science in Civil Engineering by:

- Reducing the list of engineering electives, present first footnote, to:
CEEN 4314, 4315, 4317, 4326, 4336, 4364, 4367, 4368, and 4369.
- Dropping MEEN 2302, So 2nd.
- Adding CEEN 3389 [Structural Vibration], Sr 1st.
- Dropping MEEN 3347 Jr 2nd.
- Adding AEEN 3346 [Thermal Analysis], Jr 2nd.
- Changing oral communication choice listing So 2nd to a footnote.
- Moving Global learning from Jr 1st to Jr 2nd, move POLS 2301 from Jr 2nd to So 1st, move MATH+Sci Elective from So 1st to Jr 1st, move MATH+Sci Elective from Sr 1st to Jr 2nd, move Social/behavioral from Jr 2nd to So 2nd.
- Reorganizing list on Mathematics and Science electives, GEOG 2472 replaces GEOG 4425.
- Adding footnote markers.
- Changing Humanities B Elective So 2nd to *Literature/Philosophy*.

Proposal no. CEEN-09-U-14

Modified the Bachelor of Science in Civil Engineering degree plan by:

- Replacing the “MATH + Science Elec.***” in Junior I with “Science Elective††”.
- Adding the footnote “†† Approved science electives: GEOL 1303, GEOL 3305, BIOL 1306.”
- Rewording footnote “MATH 3415, MATH 4341, MATH 4372, MATH 4374 or any other approved upper-level course in mathematics or science” to read as “MATH 3415, MATH 4341, MATH 4372, MATH 4374, or any other approved upper-level mathematics course”.
- Reword the footnote “*** Recommended mathematics and science electives:” to read as “*** Additional mathematics and science electives recommended:”
- Eliminate all geography, geology, and biology electives from footnote “*** Recommended mathematics and science electives:”.

Proposal no. AEEN-09-U-01 (This course was approved for Spring 2010)

AEEN 3346. Thermal Analysis, 3(3-0). **New course.** Properties of gases, vapors, and liquids; the first and second laws of thermodynamics; and power and refrigeration cycles. Prerequisites: MATH 2414, CEEN 2301.

Proposal no. CEEN-09-U-12

CEEN 3303. Structural Analysis, 3(3-0). **Added double credit clause.** Statically determinate structures. Moving loads. Analysis of statically indeterminate structures by consistent deformation, slope-deflection and moment-distribution. Prerequisite: CEEN 3311. Credit may not be obtained in both AEEN 3303 and CEEN 3303.

Proposal no. CEEN-09-U-10

CEEN 3304. Reinforced Concrete Design, 3(3-0). **Changed course lecture/lab hours and add clause.** Mechanics, behavior and design of reinforced concrete members subject to axial loads, bending, torsion and shear. Prerequisite: CEEN 3303. Credit may not be obtained in both AEEN 3304 and CEEN 3304.

Proposal no. CEEN-09-U-12

CEEN 3304. Reinforced Concrete Design, 3(3-0). **Added double credit clause.** Mechanics, behavior and design of reinforced concrete members subject to axial loads, bending, torsion and shear. Prerequisite: CEEN 3303. Credit may not be obtained in both AEEN 3304 and CEEN 3304.

Proposal no. CEEN-09-U-03

CEEN 3389. Structural Vibration, 3(3-0). **New course.** Static analysis of structures using a computer program. Single-degree-of-freedom systems under free and forced vibration. Response spectrum and earthquake engineering. Introduction to vibration of multi-degree-of-freedom systems. Prerequisite: CEEN 3303.

Proposal no. CEEN-09-U-11

CEEN 3392. Hydraulics and Fluid Mechanics, 3(3-0). **Changed course prerequisite.** Fluid statics, flow of fluids through pipes and open channels, hydraulic machines. Prerequisite: CEEN 2301.

Proposal no. CEEN-09-U-12

CEEN 4316. Structural Steel Design, 3(3-0). **Added double credit clause.** AISC specifications for the design of axially loaded members, beams, columns and connections. Introduction to plastic design. Prerequisite: CEEN 3303. Credit may not be obtained in both AEEN 4316 and CEEN 4316.

Proposal no. CEEN-09-U-6

CEEN 4317. Computer Methods in Civil Engineering, 3(3-0). **Changed course lecture/lab hours and prerequisites.** Applications of computer methods to solution of civil engineering problems, including the use of mathematical modeling, error analysis, optimization, solution of algebraic and differential equations and integration pertaining to infrastructure system analysis. Prerequisite: CEEN 3303.

Proposal no. CEEN-09-U-07

CEEN 4320. Foundation Engineering Analysis, 3(3-0). **Deleted course.**

Proposal no. CEEN-09-U-12

CEEN 4326. Construction Engineering, 3(3-0). **Added double credit clause.** Construction methods and management of earthwork with heavy equipment and others. Construction estimating, planning, and control. Network theory and critical path methods. Prerequisite: Credit or registration in CEEN 3342 and CEEN 3317. Credit may not be obtained in both AEEN 4326 and CEEN 4326.

Proposal no. CEEN-09-U-07

CEEN 4489. Design in Civil Engineering II., 4(2-6). **Deleted course.**

Department of Electrical Engineering and Computer Science

Proposal no. EEEN-09-U-1

Deleted the Computer Engineering Emphasis option from the BS in Electrical Engineering and drop references to options and to Electrical Systems Emphasis.

CSEN 4315. Computer Graphics, 3(3-0). **Reinstated course.** Man-machine communication in graphical form. Graphics hardware and software. Use of a commercial graphics package. Representation and manipulation of two- and three-dimensional data. Use of color. Prerequisites: CSEN 2304 and MATH 1348.

Department of Environmental Engineering

Proposal no. EVEN-09-U-03 (This course was approved for Spring 2010)

EVEN 2304. Computer Methods for EVEN, 3(3-0). **New course.** Basic computer methods useful for environmental engineering analysis and design. Introduction to programming, analysis and application software, with hands-on applications. Applications of structured, object-oriented and event-driven programming and relational databases for environmental problems.

Proposal no. EVEN-09-U-02

EVEN 3320. Chemical Principles for Environmental Engineers, 3(3-0). **Changed course number of EVEN 3420 to EVEN 3320, changed prerequisite, and removed lab component; changed lecture/lab designation.** Fundamental chemical principles for determination of the source, fate, and transformation of chemical compounds in natural and polluted environments. Climate change, air pollution, stratospheric ozone depletion, pollution and treatment of water sources, and the utilization of insecticides and herbicides. Prerequisite: CHEM 3323.

Proposal no. EVEN-09-U-01

EVEN 3321. (3321) Environmental Engineering Lab, 3(1-2). **New course.** Overview of contaminant transport and partitioning processes, chemical processes, biological processes, and

particle dynamics and separations processes. Design and performance of experiments to generate data for environmental engineering design. Statistical analyses and interpretation of experimental data. Prerequisites: MATH 3320, EVEN 2310, CHEM 1312/1112.

Department of Industrial Technology

Proposal no. ITEN-08-U-01

Modified the Bachelor of Science in Industrial Technology degree plan by:

- Changing ITEN 2330 or 2331 or 4332 Sophomore I to ITEN 2330.
- Changing CISA 1301 Freshman I to CISA 2302 Sophomore I.
- Changing BCOM 2304 or ENGL 2374 Sophomore II to *^Oral communication*.
- Changing ITEN 3300 Junior II to ITEN 3300 or ITEN 3331.
- Changing ITEN 3324 Senior I to ITEN 3323 or ITEN 3324.
- Changing Business, Adv. ⁴ Senior I to MKTG 3361 and drop footnote #4.
- Changing MGMT, adv. Senior II to MGMT 3311.
- Changing *^Global seminar* Junior I to *^Global learning*.
- Changing MATH ⁵ Freshman II and Sophomore I to MATH ⁴ Freshman I and II year and change current footnote 5 to become the new Note 4, ⁴ Any university MATH course except MATH 1350 and MATH 1351
- Changing wording of Note * to: * For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this catalog [*^Literature/philosophy, ^Oral communication, ^Visual/performing arts, ^Global learning*]
- Changing BLAW 3314 Senior II to BLAW 3341 in second semester of Junior year.

Department of Mechanical and Industrial Engineering

Proposal no. MEEN-08-U-2

Modified Bachelor of Science in Mechanical Engineering degree plan by:

- Adding PHYS 2126 to So I.
- Moving EEEN 3331 from Sr I to Jr II; MATH 3415 from Sr II to Jr I; POLS 2302 from Jr II to Sr I; and POLS 2304/2340 from Jr II to Sr II.
- Replacing Fine Arts Electives with *Visual/performing arts* and delete Fine Arts Electives from related footnote.
- Replacing Humanities B Elective with *Literature/philosophy* and delete Humanities B Elective from the related footnote.
- Deleting BCOM 2304: from footnote.

Proposal no. MEEN-09-U-1

Modified Bachelor of Science in Mechanical Engineering degree plan by:

- Moving MATH 2413 from Fr II to Fr I; CHEM 1311/1111 from Fr I to Fr II.
- Replacing STAT 4303 in Sr II with Math Elective in Sr II.
- Adding "Math electives: MATH 4341, MATH 4370, MATH 4371, MATH 4372, MATH 4373, MATH 4374." as a footnote.

Proposal no. MEEN-08-U-3

MEEN 3352. Kinematics of Machines, 3(3-0). **Changed course description.** Linkages, mobility analysis, Grashof condition, instant centers, analysis and synthesis of mechanisms, cams, gears and gear trains. Prerequisites: MATH 2414, MEEN 2302.

Proposal no. MEEN-08-U-1

MEEN 4399. Internship in MEEN, V(1-3). **New course.** Internships in industry, government or consulting companies, designed to broaden the skills obtained through curricular education. Prerequisites: senior standing.