

**Engineering for Developing Communities Track
for Undergraduate Civil Engineering Students
in the Department of Civil, Environmental and Architectural Engineering**

**Guidelines for CVEN Students and Advisors
Revised November 2007**

The purpose of this track is to prepare students who have basic competencies in issues that are critical to the understanding of the developing world. Some of these topics include: engineering, sustainability, appropriate technology, renewable energy, international education and development, business, health, and various fields of humanities.

Students must complete all requirements for their respective engineering degree. The track simply guides students to certain options within their academic requirements.

To enter the EDC track during the 2007-2008 academic year, the student must:

1. Be an undergraduate degree-seeking student with a declared major in Civil Engineering (CVEN) in the College of Engineering and Applied Science; and
2. Submit an "Addition of EDC track" to the department's undergraduate advising coordinator, preferably, as soon as the student decides to follow this track, but no later than one semester prior to the student's expected date of graduation. (For example, May graduates must declare their intent to complete the track prior to the end of the preceding fall semester, and August and December graduates must declare their intent prior to the end of the preceding spring semester.)

The student must complete the following academic requirements:

I. Technical Electives (6 credits, upper division)

Technical electives are upper division courses, generally in engineering or science. Two appropriately-focused technical elective courses should be chosen in conjunction with the student's primary academic advisor and the EDC track coordinator. The list of EDC-appropriate and currently approved technical electives for Civil Engineering students is attached to this advising guide (see Appendix A). This list is a subset of the department-approved technical electives for Civil Engineering undergraduates.

II. Design Project Experience (4 credits)

Students must complete project work focusing on a domestic or international developing community and/or sustainability topics. Typically, this design course would be taken during the student's last semester prior to graduation. To complete this requirement, students must enroll in CVEN 4830 Civil Engineering Project Design. Students must focus on sustainable development and/or appropriate technology aspects of the course projects.

III. Humanities & Social Science (9 credits, including 6 upper division)

Students must take two upper-division and one lower-division humanities/social science courses from the list of approved courses that fulfill College of Engineering and Applied Science graduation requirements. (See <http://engineering.colorado.edu/homer/>). Students who have designated the EDC track may also take courses from the EDC H&SS course list attached to this advising guide (see Appendix B). **Students must designate and complete the EDC track or receive individual permission from the H&SS Subcommittee of the Undergraduate Education Council for non-A&S Core Courses to count towards their degree.**

IV. Sustainability (3 credits)

One of the aforementioned Technical or Humanities elective courses must be a course focusing on sustainability. Many departments currently offer sustainability courses and courses available as of November 2007 are attached to this advising guide (see Appendix C). New courses are developed frequently, so if an EDC track student wants to take a course that is not already listed, this course should be pre-approved by the EDC track coordinator.

For questions concerning the academic requirements listed here, please contact the EDC track coordinator, Robyn Sandekian, at Sandekian@colorado.edu or 303-735-6708.

In addition to the above-listed requirements, EDC track students are strongly encouraged to enroll in the appropriate technologies section (if available) of GEEN 1400 Freshman Engineering Projects or GEEN 3400 Invention and Innovation. Either course counts towards the Basic Engineering Elective requirement for the Civil Engineering degree.

Upon completion of the requirements

An EDC Track Advising Form must be completed and signed by the student and the student's primary academic advisor. This form must be turned into the EDC track coordinator at least one month prior to graduation. Upon verification of track completion, the graduating student will receive a letter that briefly explains the program and indicates completion of the EDC track requirements.

Additional Information

Transfer Credit: No more than 6 credit hours of transfer or Advanced Placement (AP) / International Baccalaureate (IB) may be applied toward EDC track requirements.

Study Abroad: With prior approval by the EDC track coordinator, courses taken during study abroad programs may be accepted towards meeting EDC track requirements, depending on content. In order to verify course content, students should get as much information as possible about the course in advance, and should retain information upon return from the study abroad program. Students should separately verify with their primary advisor that courses chosen will be accepted by their major department.

Students can search online, by major, for CU-Boulder study abroad programs at <http://www.colorado.edu/OIE/studyabroad/search.html>. Students should contact the Office of International Education's Study Abroad Programs Office (<http://www.colorado.edu/OIE/studyabroad/index.html>), their primary academic advisor, and the EDC track coordinator concerning their intent to use study abroad credit as soon as they consider participating in a study abroad program.

Credits earned during a CU-sponsored program are considered "in-residence" (not "transfer") credits.

Contact Information

Robyn Sandekian, EDC track coordinator

Discovery Learning Center room DLC 111, 303-735-6708, sandekian@colorado.edu

Dr. Angela Bielefeldt, EDC faculty/advisor (environmental group)

Engineering Center Office Tower room ECOT 516, 303-492-8433, bielefel@colorado.edu

Dr. R. Scott Summers, EDC faculty/advisor (environmental group)

Engineering Center Office Tower room ECOT 540, 303-492-6644, r.summers@colorado.edu

Dr. Bernard Amadei, Director of EDC/advisor (on sabbatical, 2006-2007 academic year)

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SEM	CR	CVEN BLOCK DIAGRAM (new curriculum) showing EDC track Requirements					
8	17	Proficiency IV –3	Conc/Tech-3	Conc/Tech-3 (EDC focused tech elective) \$	Conc/Tech- 1	CVEN 4830-4 Senior Design Experience Project (EDC focus)	EDC approved H&SS Elective -3 (upper-division) \$
7	15	Proficiency III –3	CVEN 3602-3 Transportation Systems (Instructor consent) #	Conc/Tech-3 (EDC focused tech elective) \$	Conc/Tech-3 If not taking Proficiency IV-3	Proficiency IV-3	EDC approved H&SS Elective -3 (upper-division) \$
6	15	CVEN 3227-3 Probability Statistic & Decision for Civil Engrs. (APPM 2360 JR Standing) #	Proficiency I –3	CVEN 3111-3 Analytical Mechanics II (CVEN 2121 & co-req APPM 2360) #	Proficiency II–3		WRTG 3xxx-3 College- approved writing course (JR standing)
5	15	CVEN 3246-3 Intro. To Construction (JR level or Instructor Consent)	CVEN 3323-3 Hydrologic Engineering (CVEN 3313) #	CVEN 3525-3 Structural Analysis (CVEN 3161)	CVEN 3414-3 Fund. of Env. Engr. (CHEM 1211) (CHEN 1221) (APPM 2350) #	CVEN 3708-3 Geotechnical Engineering I (CVEN 3161)	
4	16	APPM 2360-4 Introduction to Linear Algebra & Differential Equations	CVEN 3313-3 Theoretical Fluid Mechanics (CVEN 2121) #	CVEN 3161-3 Mechanics of Materials I (CVEN 2121, co-req APPM 2360)	CVEN 3698-3 Engineering Geology	AREN 2300-3 Engr. Computing (APPM 1350, APPM 1360 & PHYS 1110) #	
3	18	APPM 2350-4 Calculus III for Engineers (APPM 1360 or MATH 2300)	PHYS 1120-4 PHYS 1140-1 Gen.Phys/Lab (PHYS 1110 co-req & MATH 2300 or APPM 1360)	CVEN 2121-3 Analytical Mechanics I (PHYS 1110, co- req APPM 2350)		AREN 2110-3 Thermodynamic (APPM 1360 & PHYS 1110) #	EDC approved H&SS Elective -3
2	17	APPM 1360-4 Calculus II for Engineers (APPM 1350 or MATH 1300)	PHYS 1110-4 Gen. Physics I (co-req APPM 1350 or MATH 1300)		CVEN 2012-3 Introduction to Geomatics (APPM 1350)	AREN 1017 - 2 Engineering Drawing	H&SS -3 Elective
1	16	APPM 1350-4 Calculus I for Engineers (2yr HS Alg 1yr Geom. 1/2yr Trig or approval by fac advisor)	CHEN 1211-3 Gen Chem for Engrs (1yr HS Chem or Satis. Grade in CHEM 1001 or 1021 & HS Alg., coreq CHEN 1221) &	CHEM 1221-2 General Chemistry Lab for Engineers &	Basic Engineering Elective GEEN 1400 or GEEN 3400 recommended	CVEN 1317-1 Introduction to Civil & Evt'l Engineering same as AREN 1316 #	H&SS -3 Elective

- Courses marked thus are offered only in SEMESTER shown.
 & - CHEN 1211 & CHEM 1221 must be taken concurrently.
 () - Prerequisite or Co-requisite required before taking course listed.
 \$ - Sustainability course can be either Tech or upper div H&SS elective

EDC track students are strongly encouraged to take either the appropriate technology section of GEEN 1400 or GEEN 3400 Invention & Innovation as their Basic Engineering Elective.

Design Course requirement: Students should enroll in CVEN 4830 Civil Engineering Project Design. The student's design work should focus on developing community and/or sustainable development aspects of the project.

- Design Course (EDC/Sustainability focus required)
- Technical Elective (from EDC-approved list)
- Humanities & Social Science Electives
Two upper- and one lower-division EDC-approved courses
- Course in which EDC design element could be incorporated
- Standard CVEN curriculum requirement

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EDC Track

Student _____
 Advisor _____

SID ____ - ____ - ____

Transfer credits approved
 by _____

Expected date of graduation

Mathematics (16)

APPM 1350-4 _____
 APPM 1360-4 _____
 APPM 2350-4 _____
 APPM 2360-4 _____

Basic Science (17)

CHEM 1221-2 _____
 CHEN 1211-3 _____
 PHYS 1110- 4 _____
 PHYS 1120- 4 _____
 PHYS 1140- 1 _____
 CVEN 3698-3 _____

Basic Engineering Elective (3)*

GEEN 1400-3 Engineering Projects or

* *The recommended Basic Engineering Elective for the EDC track is GEEN 1400 Engineering Projects (the appropriate technology section if offered) or GEEN 3400 Invention & Innovation. However, any 3 credit course given in the engineering college with a designator ASEN, AREN, CHEN, CVEN, CSCI, ECEN, EVEN, GEEN, or MCEN will meet the requirement.*

Engineering Science (27)

CVEN 1317-1 _____
 AREN 1017-2 _____
 AREN 2110-3 _____
 AREN 2300-3 _____
 CVEN 2012-3 _____
 CVEN 2121-3 _____
 CVEN 3111-3 _____
 CVEN 3161-3 _____
 CVEN 3313-3 _____
 CVEN 3227-3 _____

CE – Fundamentals (18)

CVEN 3246-3 _____
 CVEN 3323-3 _____
 CVEN 3414-3 _____
 CVEN 3525-3 _____
 CVEN 3708-3 _____
 CVEN 3602-3 _____

Proficiency (12)

Four of the following 5 areas:
 CVEN 3718-3 _____
 CVEN 4333-3 _____
 CVEN 3256-3 _____
 CVEN 4545/4555-3 _____
 CVEN 3424-3 _____

Concentration (6)

Circle Selection
 Const Env Geotech Struct Water
 1. _____
 2. _____

Technical Electives (7)⁴

1. w/ EDC-focus _____
 2. w/ EDC-focus _____
 3. _____

Significant Senior Design Experience (4)

CVEN 4830-4 _____
 (With EDC/sustainability focus in project)

Humanities and Social Sciences (18)⁴

1. _____
 2. _____
 3. w/ EDC-focus _____
 * 4. w/ EDC-focus _____
 * 5. w/ EDC-focus _____
 * 6. WRTG 3xxx-3 _____

**Must be 3000 level or above*

Sustainability course taken as:

H&SS Elective Tech Elective (circle one)

⁴*See Appendices for EDC-focused H&SS and Tech Elective courses*

TOTAL 128

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Appendix A: EDC-focused Technical Electives

These technical electives are a subset of those that have been approved by the Department of Civil, Environmental, and Architectural Engineering. Students should pay careful attention to course pre-requisites before enrolling in any listed course.

Course and Title	Comments
AREN 4315: Design of Masonry Structures (2 credits)	
AREN 4416: Construction Costs/Estimating	Not taught since spring 2005
AREN 4580: Daylighting	Prereq., AREN 3540 and AREN 4560
AREN 4830: Special Topics: Energy & Environmental Policy	
ASEN 4337: Remote Sensing Data Analysis	
ATOC 3500: Air Chemistry and Pollution	
CVEN 3424: Water and Wastewater Treatment	Prereq. CVEN 3414
CVEN 3434: Introduction to Applied Ecology	Spring only course
CVEN 3454: Water Chemistry	Prereq. CVEN 3414 and CHEN 1211
CVEN 4147/5147: Engineering Economics and System Design	
CVEN 4323/5423: Water Resources Engineering Design	
CVEN 4333: Engineering Hydrology	
CVEN 4353/5353: Groundwater Engineering	Fall-only course
CVEN 4423/5423: Water Resources Engineering Design	
CVEN 4424/5424: Environmental Organic Chemistry	Formerly Aquatic Organic Contaminants
CVEN 4434/5434: Environmental Engineering Design	
CVEN 4484/5484: Environmental Microbiology	
CVEN 4525: Analysis of Framed Structures	Fall-only course
CVEN 4565: Timber Design (2 credit)	Prereq. or coreq., CVEN 3525
CVEN 4838/5838: Special Topics: Engineering for the Developing World	
CVEN 5020: Energy Audit of Buildings	Prereq., AREN 3010 or equivalent (3010 has 3 pre-reqs.)
CVEN 5050: Advanced Solar Design	Prereq., AREN 2010 or equivalent
CVEN 5323: Applied Stream Ecology	
CVEN 5343: Transport & Dispersion in Surface Water	
CVEN 5363: Modeling of Hydro Systems	
CVEN 5393: Water Resources Development and Management	Prereq., senior or graduate standing. Same as ECON 6555.
CVEN 5404: Environmental Engineering Chemistry	Prereqs., CVEN 3414 and 3424, or instructor consent
CVEN 5494: Surface Water Quality Modeling	
CVEN 5534: Waste Water Treatment	Prereq. graduate standing or instructor consent

Appendix A: EDC-focused Technical Electives, continued

Course and Title	Comments
CVEN 5565: Life Cycle Engineering of Civil Infrastructure Systems	Recommended prereqs., CVEN 3535 and CVEN 3227 or equivalents
CVEN 5748: Design Of Earth Structures	Prereq., CVEN 5708
CVEN 5830: Special Topics: Energy & Environmental Policy	
CVEN 5830: Special Topics: Renewable Energy: Analysis & Assessment	
CVEN 5830: Special Topics: Sustainable Building Design	
CVEN 5834: Special Topics: Appropriate Treatment Technology	Taught once in two-year cycle
CVEN 5834: Special Topics: Environmental Engineering Processes	
CVEN 5834: Special Topics: Environmental Health in Developing Communities	
CVEN 5834: Special Topics: Global Issues in Water Supply, Sanitation and Hygiene	Taught spring 2008
EBIO 3400: Microbiology	Prereqs., EBIO 1210, 1220, 1230, and 1240, or EPOB 2050 and 2060
EBIO 4020: Stream Biology	Fall-only; Prereqs., EBIO 1210, 1220, 1230, 1240, and 2040, or EPOB 2050 and 2060
EBIO 4030: Limnology	Spring only; Prereqs., EBIO 1210, 1220, 1230, 1240, and 2040.
ECEN 3170: Energy Conversion	Uses PSPICE, MATHEMATICA, MATLAB. Prereq., ECEN 3250
ECEN 4517: Power Electronics and Photovoltaic Power Systems Laboratory	Prereq., ECEN 3170. Restricted to seniors. (Revised Spring 2008)
EMEN 4030: Project Management Systems	
ENVD 4035: Solar and Sustainable Design	Prereq., PHYS 2010 or equiv. Open to non-majors on a space avail. basis
ENVS 3070/PHYS 3070: Energy and the Environment	
ENVS 5000: Policy, Science, and the Environment	Restricted to PSCI/ENVS graduate students
ENVS 5820: Renewable Energy Policy	
EVEN 4100: Environmental Sampling and Analysis	Prereqs., CVEN 3454 and 4424 or equivalent. Recommended prereq., CVEN 4353 or equivalent.
GEOG 4732: Population Geography	Recommended prereqs., GEOG 1982, 1992, 2002 or 2412.
GEOG 5003: Elements of GIS (4 credits)	Restricted to graduate students
GEOG 5762: Sustainable Development: Theory and Classic Issues	Restricted to graduate students
GEOG 5772: Sustainable Development: Institutions & Policy	Restricted to graduate students
GEOL 4716: Environmental Field Geochemistry	Prereqs., GEOL 2700 and CHEM 1011/1031, or CHEM 1051/1071, or 1111-1131 OR 1151-1171 (or CHEN 1211)
MCEN 4141: Indoor Air Pollution	Prereq MCEN 3021 and 3022. Restricted to Junior/Senior MCEN majors/minors or EVEN majors.

Appendix B: Requested EDC Concentration HSS Course Options (in addition to A&S Core Courses shown on <http://engineering.colorado.edu/HOMER/>)

Dept	Course	Course Title	EDC Focus Area/Themes	Catalog Description
ANTH	3110	Ethnography of Mexico and Central America	Regional: Latin America	A broad overview, focusing on Mexico and Guatemala. Major topics include ethnohistory, indigenous and mestizo peoples, and contemporary problems and issues. Restricted to JRS/SRS.
ANTH	3160	Peoples of The South Pacific	Regional – Asia/Middle East/Pacific	Surveys traditional cultures and contemporary changes in Polynesia, Melanesia, and Micronesia. Explores current debates and controversies in the anthropology of the Pacific. Restricted to juniors and seniors.
ANTH	4760	Ethnography of Southeast Asia and Indonesia	Regional – Asia/Middle East/Pacific	Introduces the historical, political, and cultural dimensions of Southeast Asia, focusing primarily on Malaysia, the Philippines, Singapore, and Indonesia, with some coverage of mainland Southeast Asia. PREREQ ANTH 2100. RESTRICTED TO SOPHS/JRS/SRS.
ARAB	1010	Beginning Arabic 1	Language and Communication	Introduces students to speaking, listening, reading, and writing skills in the standard means of communication in the Arab world. This course is proficiency-based. All activities within the course are aimed at placing the student in the context of the native-speaking environment from the very beginning.
ARAB	1020	Beginning Arabic 2	Language and Communication	Continuation of ARAB 1010. Prereq., ARAB 1010 (min grade C-) or placement.
CHIN	1010	Beginning Chinese 1	Language and Communication	Introduces modern Chinese (Mandarin), emphasizing speaking as well as reading and writing. Students learn both traditional full-form characters and the simplified versions used in mainland China. Credit not granted for this course and CHIN 1150. CREDIT NOT GRANTED FOR THIS COURSE & CHIN 1150.
CHIN	1020	Beginning Chinese 2	Language and Communication	Continuation of CHIN 1010. Prereq., CHIN 1010 or instructor consent. Credit not granted for this course and CHIN 1150.
ECON	4774	Economic Reform in Developing Countries	Int'l Development/Int'l Affairs Theme	Explores competing paradigms of economic development, emphasizing the confrontation between the structuralist/dirigiste paradigm and the neoclassical public choice paradigm. Analyzes economic reforms under way in developing countries, including stabilization policy and structural adjustment. Also explores political reforms, including the pluralist revolution and the design of a constitutional Prereqs ECON 3070 or 3080.
ECON	4784	Economic Development	Int'l Development/Int'l Affairs Theme	Explores empirical, theoretical, and policy issues in economic development. Examines topics with reference to the developing countries: income distribution and poverty, demographic change, labor force employment and migration, human capital, physical capital, natural resources and the environment, industrial structure, international trade, and finance. Prereqs., ECON 3070 or 3080

Appendix B: Requested EDC Concentration HSS Course Options, cont'd.

Dept	Course	Course Title	EDC Focus Area/Themes	Catalog Description
ETHN	3403	Indian/Government Conflicts	Regional: North America/Native America	Deals with historical events involving conflicts between the U.S. government and American Indians. Examples include the role of the FBI in the Pine Ridge Sioux Reservation (1972--76) or the 1864 massacre of territory. Additional courses may relate to tribal governments. May be repeated up to 6 total credit hours on different topics. Prereq., ETHN 1016, ETHN 2002 OR ETHN 2013. Restricted to juniors/seniors. Formerly AIST 3400
FREN	1020	Beginning French 2	Language and Communication	Continuation of FREN 1010. Completes the presentation of most basic structures and French vocabulary. Prereq., successful completion of one semester of college-level French or two years of high school French. Credit not granted for this course and FREN 1050.
FREN	1010	Beginning French 1	Language and Communication	For students with no previous knowledge of French. Presents basic grammar and most commonly used French vocabulary. Introduces students to Francophone culture. Credit not granted for this course and FREN 1050.
GEOG	1992	Human Geographies	Non Specific Cultural Courses	Examines social, political, economic, and cultural processes creating the geographical worlds in which we live, and how these spatial relationships shape our everyday lives. Studies urban growth, geopolitics, agricultural development and change, economic growth and decline, population dynamics, and migration exploring both how these processes work at global scale as well as shape geographies of particular places. Meets MAPS for Soc Science.
GEOG	3682	Geography of International Development	Int'l Development/Int'l Affairs Theme	Compares and contrasts global characteristics and processes of development, emphasizing the developing countries of the world. Integrates theories of development, specific development topics, and case studies to explore the problems of development. Recommended prereqs., GEOG 1982, 1992, 2002 or 2412.
GEOG	2002	Geographies and Global Change	Environment	Familiarizes students with spatial and ecological perspectives on economic, political, social, cultural, and environmental changes. Examines roles of transnational corporations, global media, world cities, food security, labor, migration, human rights, ethnicity, nationalism, resources, environmental degradation, and sustainable development in global change.
GEOG	4732	Population Geography	Non Specific Cultural Courses	Emphasizes spatial aspects of population characteristics including fertility, mortality, migration, distribution, and composition. Includes both theoretical and empirical considerations, in addition to field work and computer simulations. Recommended prereqs., GEOG 1982, 1992, 2002 or 2412. Same as Geog 5732.
GEOG	3862	Geography of Africa	Regional: Africa	Studies physical and cultural regions of Africa. Analyzes and compares natural and cultural regions and the development of present nation-states. Recommended prereqs., GEOG 1982, 1992, 2002 or 2412.

Appendix B: Requested EDC Concentration HSS Course Options, cont'd.

Dept	Course	Course Title	EDC Focus Area/Themes	Catalog Description
HEBR	1010	Beginning Hebrew 1	Language and Communication	
HIST	4538	History of Modern India	Regional – Asia/Middle East/Pacific	Examines the history of India from the British conquest of India in the late 18th century to independence in 1947. Emphasizes the impact of British rule on the political, economic, and social development of modern India. Recommended prereq., at least 6 hours of history credit. Restricted to sophomores/juniors/seniors. Same as HIST 5538. RECOMMENDED 6-HRS HIST COURSEWORK. RESTRICTED TO SOPHS/JRS/SRS.
HIST	4628	Modern China	Regional – Asia/Middle East/Pacific	Examines China from 1750 to 1949. Focuses on such issues as the influence of imperialism, the emergence of nationalism, and the meaning of revolution. Restricted to sophomores/juniors/seniors. Same as HIST 5628.
JOUR	6211	Communication and International Development	Int'l Development/Int'l Affairs Theme	Studies and analyzes communications technologies and techniques used in addressing social problems in developing countries.
KREN	1020	Beginning Korean 2	Language and Communication	Continuation of KREN 1010. Prereq., KREN 1010 or instructor consent.
KREN	1010	Beginning Korean 1	Language and Communication	Trains students in elementary conversational and writing skills and provides grounding in the basic idiomatic and syntactical features of Korean, through lectures, drills, and language laboratory sessions based on set dialogues and readings.
PORT	1010	Beginning Portuguese 1	Language and Communication	Offers students a firm command of Portuguese grammar. Uses grammar as point of departure for development of oral skills. Reading and writing stressed to lesser degree. Attendance at language laboratory may be mandatory. Credit not granted for this course and PORT 1150.
PORT	1020	Beginning Portuguese 2	Language and Communication	Continuation of PORT 1010. Prereq., PORT 1010 (min grade C-) or placement. Credit not granted for this course and PORT 1150.
PSCI	3201	Environment and Public Policy	Environment	Considers constitutional, political, and geographic factors in development of public policy affecting the use of natural resources and management of the environment; organization, procedures, and programs for use of natural resources and administration of environmental policies. Prereq., PSCI 1101.
PSCI	3072	Government and Politics in Southeast Asia	Regional – Asia/Middle East/Pacific	Surveys historical and contemporary forces shaping politics in Southeast Asia. Gives special attention to comparative political economy, including development strategies and transitions to democracy. Prereqs., PSCI 2012 or IAFS 1000.

Appendix B: Requested EDC Concentration HSS Course Options, cont'd.

Dept	Course	Course Title	EDC Focus Area/Themes	Catalog Description
RLST	3300	Indian Buddhism (now Foundations of Buddhism)	Regional – Asia/Middle East/Pacific	Studies selected aspects of Buddhist tradition in India, including the life of the Buddha, development of the early community, Buddhist contemplative tradition, early Buddhist philosophy and psychology, and origins and development of Indian Mahayana Buddhism.
RLST	3800	Chinese Religions	Regional – Asia/Middle East/Pacific	Studies classical Confucianism, Taoism, Buddhism, and Neo-Confucianism within the historical context of Chinese culture.
RLST	3200	Hinduism	Regional – Asia/Middle East/Pacific	Studies literature, beliefs, practices, and institutions of Hinduism, in historical perspective.
RUSS	1020	Beginning Russian 2	Language and Communication	
RUSS	1010	Russian	Language and Communication	For students with no previous training in Russian.
SPAN	1020	Beginning Spanish 2	Language and Communication	Continuation of SPAN 1010. Attendance at the language laboratory may be mandatory. Prereq., SPAN 1010 (min grade of C-), or placement. Credit not granted for this course and SPAN 1150.
SPAN	1010	Spanish	Language and Communication	Offers students a firm command of Spanish grammar. Grammar is used as a point of departure for development of oral skills. Reading and writing are stressed to a lesser degree. Attendance at the language laboratory may be mandatory. Credit not granted for this course and SPAN 1150.
WMST	3500	Global Gender Issues	Int'l Development/Int'l Affairs Theme	Introduces global gender issues, such as the gendered division of labor in the global economy, migration, women's human rights, environmental issues, gender violence in war, women in the military, nationalism and feminism, and the representation of the Third World in the United States. Offers students the opportunity to broaden their perspectives beyond the borders of the United States. Prereq., WMST 2000, 2050 or 2600. Restricted to sophomores/ juniors/ seniors.

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Appendix C: Courses with Emphasis on Sustainability Offered at CU Boulder

Regularly Offered

College of Arts and Sciences

ENVS/PHYS 3070: Energy and the Environment
ENVS 5810: Water Resources, and Environmental Sustainability
ENVS 5820/7820: Renewable Energy Policy
GEOG 5762: Sustainable Development: Theory and Classical Issues

Leeds School of Business

MBAX 6130-800 Sustainable Energy Ventures
MBAX 6845: Entrepreneurial Strategies for Emerging Markets
MGMT 4080: Environmental Operations

College of Engineering and Applied Science

AREN 3130: Building Energy Laboratory
CVEN 4700/5700: Sustainability and the Built Environment
CVEN 5020: Building Energy Audits
CVEN 5050: Advanced Solar Design
CVEN 5565: Life Cycle Engineering of Civil Infrastructure Systems
CVEN 5834 Environmental Health for Developing Communities
GEEN 3300: Sustainability and Ethics

School of Journalism

JOUR 6211: Communication and International Development

School of Law

LAWS 7132-001: Energy Insecurity and Sustainable Energy

Previously or Occasionally Offered Courses (and date of last offering, if known)

College of Arts and Sciences

ENVS 5100-002: Energy Policy Seminar (1 credit, Fall 2006)
ENVS 5100-003: Field Course in the Energy Industry (2 credits)
GEOG 5772: Sustainable Development: Institutions and Policy

Leeds School of Business

BADM 4820-001: Special Topics: Strategies in Sustainable Tourism (Spring 2007)
BADM 4820-003 and 004: Sustainability: Business and the Environment (Spring 2007)
BCOR 4000: Sustainable Energy
BCOR 4000: Sustainable Venturing
BCOR 4000: Sustainability Ethics for Business (Spring 2007)
BCOR 4000: Sustainability Principles and Practice
BCOR 4000: Sustainability and Business Ethics
BCOR 4000: Assessing Sustainable Energy Technologies (Spring 2007)
SYST 6820: Assessing Sustainable Energy Technologies (Spring 2006)
TOMG3500: Tourism Destination Development (Spring 2005, discontinued program)
TOMG 4820/ENVS 4100: Spec. Topics: Sust., Tourism, and the Nat'l Env't (Sum 2004)

College of Engineering and Applied Science

CVEN 4838: Sustainable Engineering Business Strategies (Spring 2006)
CVEN 4838/5838: Special Topics: Natural Capitalism for Engineers (Maymester 2005)
CVEN 5830: Special Topics: Renewable Energy, Analysis, and Assessment
CVEN 5830: Special Topics: Energy and Environmental Policy
CVEN 5830: Special Topics: Sustainable Building Design
CVEN 5830-002 and AREN 4830: Special Topics: Energy Technology and Policy
CVEN 5837 Special Topics: Sustainable Infrastructure Systems (Spring 2008)
MCEN 1208: Special Topics: Sustainable Energy (Spring 2007)
MCEN 4228/5228: Special Topics: Sustainable Energy (Fall 2007)

(As of November 26, 2007)