Electronic Course Authorization System (ECAS)

DES 3901 - VIEW COURSE PROPOSAL

Back to Proposal List

Approvals Received:	**Department** on 4/11/22 by Susan Finnegan (finne006@umn.edu) >	**College/Dean** on 4/26/22 by Agnes Chagani (chaga002@umn.edu)
Approvals Pending:	**Provost** > LE > Catalog	
Effective Status:	Active	
Effective Term:	1233 - Spring 2023	
Course:	DES 3901	
Institution:	UMNTC - Twin Cities/Rochester	
Campus:	UMNTC - Twin Cities	
Career:	UGRD	
College:	TALA -	
Department:	11965 -	

General

Course Title Short:	Prin. of Wearable Technology
Course Title Long:	Principles of Wearable Technology
Max-Min Credits for Course:	3.0 to 3.0 credit(s)
Catalog Description:	Exploration of tech, theories, and best practices for designing and developing systems incorporating wearable technology. This lecture-based class will introduce students to the physical principles that underlie many wearable technology subsystems, the ways in which those technologies have been developed by and for different stakeholder groups, and will discuss design approaches that conscientiously consider the broader implications for wearable technology, including a focus on user experience and wearability in systems design. This course is an introductory course that focuses on wearable technology concepts blending User-Centered Design and sociocultural perspectives on wearable technology with Engineering Systems development. It is intended to be approachable for students with a wide variety of interests and backgrounds. Course material is explored through readings, lectures, discussions, and course projects. Optional laboratory course (DES.5902) provides hands-on opportunities to put these principles into practice.
Print in Catalog?:	Yes
CCE Catalog Description:	false
Grading Basis:	AFV

Topics Course:	No
Honors Course:	No
Online Course:	Yes
Freshman Seminar:	No
Is any portion of this course taught outside of the United States?:	No
Community Engaged Learning (CEL):	**New:** None **Old:**
Instructor Contact Hours:	3.0 hours per week
Course Typically Offered:	Every Spring
Component 1:	LEC
Component 2:	<No text provided>
Auto Enroll Course:	No
Graded Component:	LEC
Academic Progress Units:	3.0 credit(s) (Not allowed to bypass limits.)
Financial Aid Progress Units:	3.0 credit(s) (Not allowed to bypass limits.)
Repetition of Course:	Repetition not allowed.
Course Prerequisites for Catalog:	<No Text Provided>
Course Equivalency:	<No text provided>
Cross-listings:	Parent course: DES 3901, crosslist: Des 5901
Add Consent Requirement:	No required consent
Drop Consent Requirement:	No required consent
Enforced Prerequisites: (course-based or non-course-based):	No prerequisites
Editor Comments:	To add a new course DES 3901 to be taught in conjunction with DES 5901 for undergraduate students. This will have a LE component. SAF 3/21/22
Proposal Changes:	<No text provided>
History Information:	To add a new course DES 3901 to be taught in conjunction with DES 5901 for undergraduate students. This will have a LE component. SAF 3/21/22
Faculty Sponsor Name:	Brad Holschuh and Lucy Dunne
Faculty Sponsor E-mail Address:	bth@umn.edu, ldunne@umn.edu

Student Learning Outcomes

Student Learning Outcomes

* Students in this course:

- Can identify, define, and solve problems

How will you assess the students' learning related to this outcome? Give brief examples of how class work related to the outcome will be evaluated.

Students in this course will be able to identify, define and solve problems to satisfy human needs through the use of wearable technology systems.

Please explain briefly how this outcome will be addressed in the course. Give brief examples of class work related to the outcome.

Learning will be assessed through evaluation of existing wearable technology products and systems, exams, and in-class discussions.

- Have mastered a body of knowledge and a mode of inquiry

How will you assess the students' learning related to this outcome? Give brief examples of how class work related to the outcome will be evaluated.

Students in this course will have mastered a body of knowledge and a mode of inquiry through critical evaluation of assigned readings, evaluation of existing wearable products and systems, and in class discussions.

Please explain briefly how this outcome will be addressed in the course. Give brief examples of class work related to the outcome.

Learning will be assessed through evaluation of these critiques and design projects, exams, and through structured peer review.

Liberal Education

Requirement this course fulfills: TS Technology and Society

Other requirement this course fulfills: <no text provided>

Criteria for Core Courses:

Describe how the course meets the specific bullet points for the proposed core requirement. Give concrete and detailed examples for the course syllabus, detailed outline, laboratory material, student projects, or other instructional materials or method.

Core courses must meet the following requirements:

- **They explicitly help students understand what liberal education is, how the content and the substance of this course enhance a liberal education, and what this means for them as students and as citizens.**
- **They employ teaching and learning strategies that engage students with doing the work of the field, not just reading about it.**
- **They include small group experiences (such as discussion sections or labs) and use writing as appropriate to the discipline to help students learn and reflect on their learning.**
- **They do not (except in rare and clearly justified cases) have prerequisites beyond the University's entrance requirements.**
- **They are offered on a regular schedule.**
- **They are taught by regular faculty or under exceptional circumstances by instructors on continuing appointments. Departments proposing instructors other than regular faculty must provide documentation of how such instructors will be trained and supervised to ensure consistency and continuity in courses.**

Criteria for Theme Courses:

Describe how the course meets the specific bullet points for the proposed theme requirement. Give concrete and detailed examples for the course syllabus, detailed outline, laboratory material, student projects, or other instructional materials or methods.

Theme courses have the common goal of cultivating in students a number of habits of mind:

- **thinking ethically about important challenges facing our society and world;**
- **reflecting on the shared sense of responsibility required to build and maintain community;**
- **connecting knowledge and practice;**
- **fostering a stronger sense of our roles as historical agents.**

Theme Course Requirements:
As a theme course, our course addresses the impact of wearable technology on society, and the ways in which decisions made by technology developers impact the lives of users and non-users. The course is explicitly focused on bridging knowledge and practice, understanding the broader implications of design and engineering activities. More detail on the topics considered and approach taken is included below.

Technology and Society Course Requirements:
The course examines both the physical/functional aspects of wearable technologies as well as the social and ethical implications of these technologies. Most weeks include both a 1 hour lecture to cover the principles of wearable technology, as well as a 1 hour small+large group discussion to address social and ethical concerns of the technology, made possible through a series of outside readings designed to provoke critical thought on the engineering and use of wearable technologies in both current future scenarios. The course begins with a three-week conceptual physics crash course -- designed to create a foundational understanding of physical concepts relevant to wearable technologies (electricity and circuits, mechanics and energy, and thermodynamics and heat transfer) that is approachable for students of varying backgrounds (as we expect this course to attract students in both STEM and non-STEM programs). This will enable the students to understand the science and engineering of wearable devices,

which are covered in detail in lecture and discussion in weeks (5-8), with lectures and discussions dedicated to mechanical and biometric sensing, as well as mechanical and non-mechanical actuation. The second half of the course considers questions of user interaction with the technologies, including usability, wearability/fit/comfort, social considerations, and data collection/processing and information/algorithms.

Readings each week are split between technical reading (exploring technological approaches to each topic in more depth) and sociocultural reading (exploring the translation of technical approaches into the world, the ways in which decisions have repercussions, and examples of unintended consequences of technology development). Discussion topics include privacy and security in personal data (from the perspectives of several stakeholder groups), bias in design (including physical/anthropometric bias, bias in sensor/system design, and bias in algorithms and artificial intelligence), ethical implications of augmenting human physical abilities and cognition, and cultural backlash against wearable devices.

The course deliverables are split across a conceptual physics exam, a series of comprehension quizzes and discussion summaries, as well as a final project designed to critically evaluate a current (or proposed) wearable device. Project requirements ask students to explore both the provenance of the device (who developed it and in what context); the technical specifications of the device (how does it work); and the implications of the device (is it likely to work as advertised, is it likely to An example of a typical week in class is as follows:

Lecture -- Mondays, 1:55-3:50pm

Typical Agenda:

1:55-2:30: Divide the class into groups of 4 to discuss a series of technology and ethics questions related to the previous week?s readings/lecture, and produce a summary slide of the discussion points to be submitted for review.

2:30-3:00: Reconvene the class into a large group discussion to share the details of the small group discussions

3:00-3:50: Lecture on next course topic

Example list of Small Group Discussion Questions -- Topic: Wearable Robotics

Technical Questions:
1. What are the performance metrics of interest when selecting a specific mechanical actuator technology for a wearable application? What do they mean, physically, and how does each affect the performance of a wearable system?
2. What are the tradeoffs ? in terms of both performance and wearability -- between rigid actuation technologies and soft actuation technologies?
3. What are the challenges / strategies for anchoring mechanical actuators on the body? Specifically, what is necessary to anchor and transmit forces from actuators to specific body locations? And how might actuators be deployed to create innovative anchoring solutions?
4. Many actuators exhibit linear force vs. length behavior ? how might that behavior complicate the performance of wearable robotic systems across varying user groups / populations?

Socio-Cultural Questions:
1. You have been given the responsibility for outfitting the US military with new technologies to make them more effective, and more lethal, war fighters. Where do you draw the line (if at all) when considering if/how wearable robotics should be considered for this objective?
2. You work for a health insurance company responsible for deciding which treatments/devices are eligible for reimbursement. Wearable robotics can improve the quality of life of your customers, but can cost more than $1,000,000 each ? how should you approach the ethical question of reimbursement for wearable robots?
3. You are a policy maker in the federal government, responsible for setting regulations on workers? rights (maximum hours worked, frequency/length of rest breaks required, limits on intensity of strenuous tasks, etc.). How should you consider the role of government regulation of workers? rights in an era where wearable robotics are widespread and available to all manual laborers?
4. Wearable robots are a form of human augmentation -- providing new, often-times super-human abilities to those who have the means to acquire the technology. How can we, as a society, address the concern of wearable robotics accelerating inequality between the "haves" and the "have-nots" (i.e., those with means can effectively "buy" performance enhancement, thereby further increasing the gap between and those who lack the means)?

Example list of Readings -- topic: Wearable Robotics

Hunter, Ian W., John M. Hollerbach, and John Ballantyne. "A comparative analysis of actuator technologies for robotics." Robotics Review 2 (1991): 299-342.
Sanchez, Vanessa, Conor J. Walsh, and Robert J. Wood. "Textile Technology for Soft Robotic and Autonomous Garments." Advanced Functional Materials 31.6 (2021): 2008278.
Kapeller, Alexandra, et al. "A Taxonomy of Ethical, Legal and Social Implications of Wearable Robots: An Expert Perspective." Science and Engineering Ethics (2020): 1-19.
Greenbaum, Dov. "Ethical, legal and social concerns relating to exoskeletons." ACM SIGCAS Computers and Society 45.3 (2016): 234-239.

LE Recertification-Reflection Statement (for LE courses being re-certified only): <No text provided>

Statement of Certification:

This course is certified for a Core (blank) as of
This course is certified for a Theme (blank) as of

Writing Intensive

Propose this course as Writing Intensive curriculum: No

Question 1 (see CWB Requirement 1):

What types of writing (e.g., reading essay, formal lab reports, journaling) are likely to be assigned? Include the page total for each writing assignment. Indicate which assignment(s) students will be required to revise and resubmit after feedback by the instructor or the graduate TA.

<No text provided>

Question 2 (see CWB Requirement 2):

What types of writing (e.g., research papers, problem sets, presentations, technical documents, lab reports, essays, journaling etc.) will be assigned? Explain how these assignments meet the requirement that writing be a significant part of the course work, including details about multi-authored assignments, if any. Include the required length for each writing assignment and demonstrate how the 2,500 minimum word count (or its equivalent) for finished writing will be met.

<No text provided>

Question 3 (see CWB Requirement 3):

How will students' final course grade depend on their writing performance? What percentage of the course grade will depend on the quality and level of the student's writing compared to the percentage of the grade that depends on the course content? Note that this information must also be on the syllabus.

<No text provided>

Question 4 (see CWB Requirement 4):

Write up a sample assignment handout here for a paper that students will revise and resubmit after receiving feedback on the initial draft.

<No text provided>

Question 5 (see CWB Requirement 5):

What types of instruction will students receive on the writing aspect of the assignments?

<No text provided>

Question 6 (see CWB Requirement 6):

How will the assistants be trained and supervised?

<No text provided>

Statement of Certification: This course is certified for a Theme (blank) as of

Course Syllabus

Course Syllabus:

Syllabus Overview
Course title: Principles of Wearable Technology
DES 3901.1
Spring 2023
MWF 1:55-2:45
online--remote/synchrounous
3 credits
No final
Instructors: Dr. Brad Holschuh and Lucy Dunne
Office: 354 McNeal/356 McNeal
Office Hours: by appointment
Course Prerequisites: none
Course Information and Instructor?s Expectations
Course Description:
Exploration of technologies, theories, and best practices for designing and developing systems incorporating wearable technology. This lecture-based class will introduce students to the physical principles that underlie many wearable technology subsystems, the ways in which those technologies have been developed by and for different stakeholder groups, and will discuss design approaches that conscientiously consider the broader implications for wearable technology, including a focus on user experience and wearability in systems design.
This course is an introductory course that focuses on wearable technology concepts blending User-Centered Design and sociocultural perspectives on wearable technology with Engineering Systems development. It is intended to be approachable for students with a wide variety of interests and backgrounds. Course material is explored through readings, lectures, discussions, and course projects. Optional laboratory course (DES.5902) provides hands-on opportunities to put these principles into practice.
DES 3901 Liberal Education requirement:
A guiding principle of this course is the liberal education perspective, in which innovation and its implications must be considered from a broad array of philosophical and practical standpoints. Through reading, classroom discussion, and critical course projects we will explore the relationship between wearable technologies and the important challenges facing individuals and groups in our world, as well as our ethical shared responsibility to understand and shape decisions that influence these relationships for future technologies. An additional weekly class meeting (Fridays) will provide the opportunity for DES 3901 students to delve more deeply into both technical and sociocultural aspects of each week?s topic, including embodied experiences with hardware.
Required and Recommended Materials:
Required Text
None ? readings will be distributed to class through the course website.

Recommended Texts
Hewitt, P. Conceptual Physics. Pearson (12th Edition), 2014.
Watkins, S. and Dunne, L. Functional Clothing Design. Fairchild Books (2nd Edition), 2015.
Student Learning Outcomes following course completion: (must identify at least one outcome and how it relates to this course how it will be addressed and how it will be assessed, http://www.slo.umn.edu/) This course meets the Liberal Education Technology and Society theme requirements. The following Student Learning Outcomes support these requirements by preparing students to critically evaluate both the technological functionality of a wearable device and the sociocultural forces that guided its development, as well as the implications of device design decisions for diverse stakeholder groups.
1. Students in this course will be able to identify, define and solve problems to satisfy human needs through the use of wearable technology systems. Learning will be assessed through evaluation of existing wearable technology products and systems, exams, and in-class discussions.
2. Students in this course will have mastered a body of knowledge and a mode of inquiry through critical evaluation of assigned readings, evaluation of existing wearable products and systems, and in class discussions. Learning will be assessed through evaluation of these critiques and design projects, exams, and through structured peer review.
Release of Work Statement:
Students understand that enrollment in this course grants consent for their work to be selected for inclusion in college or departmental publications (online or in print). Your instructor may

select to use your work to represent her/his skills as an instructor in a teaching portfolio (online or in print).
Attendance:
Attendance is expected for all class sessions, and punctuality is essential. If you must miss a class session, you are responsible for arranging to make up any missed work and for all material and information covered in that class. You are expected to participate in class discussions and lab exercises, and be respectful and polite when critiquing classmates' work. The faculty reserve 10% of the final grade for class-participation, evaluated holistically based on student attendance and participation.

The following reasons justify absences and makeup requests and must be documented: (a) illness certified by the Boynton Health Service or another physician (b) death of parent, sibling, or grandparent (proof of funeral attendance must be supplied), (c) participation in religious observances with advance instructor notification (d) participation, certified by the Office for Student Affairs (Office of the Registrar-St. Paul, 190 Coffey Hall), in University approved co-curricular activities.
Workload:
Readings
Most weeks include an explicit reading assignment as well as self-directed project research reading. Assigned reading should be completed before the relevant lecture.
Conceptual Physics Exam
One take-home exam will be administered during the semester focusing on conceptual physics concepts relevant to wearable systems. The exam is aimed at reinforcing important concepts in the relevant lectures and textbook readings.
Weekly Comprehension Quizzes and Discussions
Each week the class time will be divided equally between a content lecture (55m) and small group discussion (55m) focusing on a reading assignment from that week. An online comprehension quiz will be administered after each lecture and must be completed within 24 hours to evaluate your understanding of the concepts taught in lecture that day. Small group discussions will center on applications and social issues related to the wearable technology topic at hand, starting in small group breakout sessions and culminating in a larger group discussion. A written deliverable is part of most breakout discussions.
Final Project
A final wearable technology project, focusing on a critical assessment (both technological and sociological factors) of a past or present wearable technology product, incorporating concepts taught in class. This project will be completed individually, culminating in a detailed final report (white paper) as well a final presentation. Full details will be provided in the project assignment.
Grading Structure:
http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html
A grading rubric will be provided for each assignment, and will outline the criteria for evaluation for the specific assignment. If these criteria are not clear, it is your responsibility to ask for clarification. Your course grade will be calculated from your weighted project grades, as follows:
Participation and class exercises: 50% (25% comprehension quizzes, 25% discussion)
Conceptual Physics Exam:
20%
30%
Total 100%
The final grade ? normalized to 100% -- is based on accumulated points divided by total points possible.
Grades are determined as follows:

A	93%	B	83%	C	73%	D	63%
A-	90%	B-	80%	C-	70%	F	below 60%
B+	86%	C+	76%	D+	66%		

Accepting and Returning Assignments:
Most work will be submitted digitally, by email or through Canvas. Assignment comments are returned digitally or physically, depending on the assignment, and grades are posted on the course Canvas site.
Grading Late Work:
Assignments are due at the beginning of class specified in the syllabus, and will otherwise be considered late. Late work will be accepted at the beginning of the next class period, with a penalty of one letter grade. No work will be accepted more than one class period late.
Make Up Work for Legitimate Absences: https://policy.umn.edu/education/makeupwork
Extra Credit Options:
Extra credit options are rare, and will be announced in class if and when they arise.
University Policies
Personal Electronic Devices in Classroom:
Students may be directed to turn off personal electronic devices if the devices are not being used for class purposes. Students are not permitted to record any part of a class/lab/other session unless explicitly granted permission by the instructor. If the student does not comply, the student may be asked to leave the classroom.
Use of Class Notes and Materials:
Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially

furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community.
Scholastic Dishonesty and Student Conduct Code:
You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.
http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf
Sexual Harassment: https://policy.umn.edu/hr/sexualharassment
Statement on Climate of Inclusivity:
You are expected to be attentive during class, ask questions if you do not understand something, and to
offer your opinion. You are also expected to listen respectfully to other students and to me when speaking. The University of Minnesota is committed to providing a safe climate for all students, faculty, and staff. All persons shall have equal access to its programs and facilities without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation. Racism, sexism, homophobia, classism, ageism and other forms of bigotry are inappropriate to express in this class. Reports of harassment are taken seriously, and there are individuals and offices available for help.
Academic Freedom and Responsibility:
Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom and conduct relevant research. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. When conducting research, pertinent institutional approvals must be obtained and the research must be consistent with University policies. Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help.
Availability of Disability and Mental Health Services:
The University of Minnesota is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DS at 612-626-1333 to arrange a confidential discussion regarding equitable access and reasonable accommodations. If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be applied in the course. For more information, please see the DS website, https://diversity.umn.edu/disability/.
Academic Services:
If you would like additional help, please contact one of the offices listed below.

Wk. DES.3901 /5901
Monday Lecture (50m) DES.3901 /5901
Wednesday Discussion (50m) DES.3901
Friday Discussion (50 min) DES.3901/5901
Readings & Assignments
1 No Class (semester starts Tuesday 1/19) Introduction to Wearable Technology
Wearable Technology in the Liberal Education Curriculum (Dunne) History of wearable
technology Supplemental Readings
2 Conceptual Physics:
Circuits & Electricity (Holschuh) Conceptual Physics: Circuits &
Electricity (Holschuh) Conceptual Physics:
Circuits & Electricity Lecture:
Conceptual Physics Ch. 22-23 Supplemental Readings
3 Conceptual Physics:
Mechanics and Energy (Holschuh) Conceptual Physics:
Mechanics and Energy (Holschuh) Conceptual Physics:
Mechanics and Energy Lecture:
Conceptual Physics Chs. 4-8 Supplemental Readings
4 Conceptual Physics:
Thermodynamics and Heat Transfer (Holschuh) Conceptual Physics:
Thermodynamics and Heat Transfer (Holschuh) Conceptual Physics:
Thermodynamics and Heat Lecture:
Conceptual Physics Chs. 15-18 Supplemental Readings
5 Sensing: Mechanics
(Dunne) Discussion: Accuracy of step
counters, privacy in wearables Conceptual Physics review
(Holschuh) Supplementary
Readings

TAKE HOME EXAM GIVEN
6 Sensing: Biometrics (Dunne) Discussion: Skin color bias/error in biometric sensing Sensing technologies Supplementary Readings
TAKE HOME EXAM DUE
7 Mechanical Actuation: Rigid and Non-rigid robotics (Holschuh) Discussion: Ethics of wearable robots Non-Mechanical Actuation: Haptics, Robotics technologies Supplementary Readings
8 Non-Mechanical Actuation: Temperature, Optics (Holschuh) Discussion: VR, Wearables, and Hedonics VR/AR/MR technologies Supplementary Readings
9 Wearability, Fit, Comfort (Dunne) Final Project Intro Discussion: Bias in sizing and fit Human factors of wearability Supplementary Readings Final Project Assigned
10 Usability and HCI (Holschuh) Discussion: Accessibility and wearables Human interface technologies Supplementary Readings
11 Information and data (Dunne) Discussion: Big data algorithms, ethics of ML Algorithms Supplementary Readings
12 NO CLASS ? SPRING BREAK
13 Softgoods and Hardgoods Fabrication (Dunne) Discussion: Sustainability and environmental impacts of wearables Fabrication technologies Supplementary Readings
14 Consumer Adoption (Dunne) Discussion: social aspects of wearability Marketing approaches Supplementary Readings
15 Final Project work session/ Wrap-up topics Final project presentations part 1 Final project presentations part 2 Final presentation slides Due
16 Final project Presentations part 3 Final Report Due
FINALS PERIOD:
Final Project Presentations (if necessary) Saturday (5/8) -- 1:30-3:30pm
** Schedule subject to change, see Canvas for most recent version

Strategic Objectives & Consultation

Name of Department Chair Approver: Hye-Young Kim

Strategic Objectives - Curricular Objectives:

How does adding this course improve the overall curricular objectives of the unit?

This course is an introductory course that focuses on wearable technology concepts
blending User-Centered Design and sociocultural perspectives on wearable technology with Engineering Systems development. It is intended to be approachable for students with a wide variety of interests and backgrounds. Course material is explored through readings, lectures, discussions, and course projects.

Strategic Objectives - Core Curriculum:

Does the unit consider this course to be part of its core curriculum?

No

Strategic Objectives - Consultation with Other Units:

Before submitting a new course proposal in ECAS, circulate the proposed syllabus to department chairs in relevant units and copy affiliated associate dean(s). Consultation prevents course overlap and informs other departments of new course offerings. If you determine that consultation with units in external college(s) is unnecessary, include a description of the steps taken to reach that conclusion (e.g., catalog key word search, conversation with collegiate curriculum committee, knowledge of current curriculum in related units, etc.). Include documentation of all consultation here, to be referenced during CCC review. If email correspondence is too long to fit in the space provided, paraphrase it here and send the full transcript to the CCC staff person. Please also send a Word or PDF version of the proposed syllabus to the CCC staff person.

Sent for consultation by Associate Dean Sue Chu to other Associate Deans around the University.

Back to Proposal List