GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

*Copy and paste **current** course information from* *Class Search/Course Catalog.*

Academic Unit	Ira A. Fulton Schools of Engineering			Department	Computing, Informatics, and Decision Systems Engineering, Computer Science		

Subject **CSE** Number **486** Title Computer Science Capstone Project II Units: 3

Is this a cross-listed course?
If yes, please identify course(s) No

Is this a shared course? No If so, list all academic units offering this course

Course description:
Second course in capstone sequence for computer science majors continuing the development, process, technical skills, teamwork and communication.

Requested designation: Literacy and Critical Inquiry–L
*Note- a **separate** proposal is required for each designation requested*

Eligibility:

Permanent numbered courses must have completed the university's review and approval process.
For the rules governing approval of omnibus courses, contact Phyllis.Lucie@asu.edu or Lauren.Leo@asu.edu.

Submission deadlines dates are as follow:

For Fall 2015 Effective Date: October 9, 2014   For Spring 2016 Effective Date: March 19, 2015

Area(s) proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

Checklists for general studies designations:

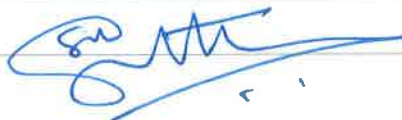Complete and attach the appropriate checklist

- Literacy and Critical Inquiry core courses (L)
- Mathematics core courses (MA)
- Computer/statistics/quantitative applications core courses (CS)
- Humanities, Arts and Design core courses (HU)
- Social-Behavioral Sciences core courses (SB)
- Natural Sciences core courses (SQ/SG)
- Cultural Diversity in the United States courses (C)
- Global Awareness courses (G)
- Historical Awareness courses (H)

A complete proposal should include:

☒ Signed General Studies Program Course Proposal Cover Form
☒ Criteria Checklist for the area
☒ Course Catalog description
☒ Course Syllabus
☒ Copy of Table of Contents from the textbook and list of required readings/books

Respectfully request that proposals are submitted electronically with all files compiled into one PDF. If necessary, a hard copy of the proposal will be accepted.

Contact information:

Name Dr. Debra Calliss   Phone 965-1727

Mail code 8809   E-mail: debra.calliss@asu.edu

Department Chair/Director approval: *(Required)*

Chair/Director name (Typed): Dr. Sandeep Gupta   Date: February 5, 2015

Chair/Director (Signature):

Arizona State University Criteria Checklist for
Proposer: Please complete the following section and attach appropriate documentation.

		ASU - [L] CRITERIA	
		TO QUALIFY FOR **[L]** DESIGNATION,THE COURSE DESIGN MUST PLACE A MAJOR EMPHASIS ON COMPLETING CRITICAL DISCOURSE--**AS EVIDENCED BY THE FOLLOWING CRITERIA:**	
YES	**NO**		**Identify Documentation Submitted**
[X]	[ ]	**CRITERION 1:** At least 50 percent of the grade in the course should depend upon writing assignments (see Criterion 3). Group projects are acceptable only if each student gathers, interprets, and evaluates evidence, and prepares a summary report. *In-class essay exams may not be used for [L] designation.*	CSE486 Spring 2015 Syllabus

1. Please describe the assignments that are considered in the computation of course grades--and indicate the proportion of the final grade that is determined by each assignment.

    Individual work:
    *   Technical presentation 10%
    *   Exit exam
        *   Essay questions 5%
    *   Participation and peer feedback 5%
    *   Presentation analysis 5%
    *   Professional responsibility essay 10%
    *   Individual summary report and peer evaluation 15%

    Details on the work are included CSE486 Description of Student Work.

2. **Also:**

    Please **circle, underline, or otherwise mark** the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading

    C-1

[X]	[ ]	**CRITERION 2:** The writing assignments should involve gathering, interpreting, and evaluating evidence. They should reflect critical inquiry, extending beyond opinion and/or reflection.	CSE 486 Description of Student work

ASU - [L] CRITERIA

1. Please describe the way(s) in which this criterion is addressed in the course design.

   Students have are required to gather, interpret, and evaluate evidence in the following work.
   - Technical presentation where students must research a topic, write a presentation and then deliver the presentation to the class.
   - Individual summary report and peer evaluation where students review and critique the work done by their peers and themselves, evaluate the results and then write a summary of the work.
   - Analysis presentations where students are to review the work of other students' presentations and write a summary of the analysis.
   - Participation and peer feedback where students are required to attend and critique student presentation while reflecting on the topic and lifelong learning methods.

   Details on the work are included CSE486 Description of Student Work.

2. **Also:**

   Please **circle, underline,** or **otherwise mark** the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading

   C-2

	X		**CRITERION 3:** The syllabus should include a minimum of two writing and/or speaking assignments that are substantial in depth, quality, and quantity. Substantial writing assignments entail sustained in-depth engagement with the material. Examples include research papers, reports, articles, essays, or speeches that reflect critical inquiry and evaluation. Assignments such as brief reaction papers, opinion pieces, reflections, discussion posts, and impromptu presentations are not considered substantial writing/speaking assignments.	CSE 486 Description of Student work

1. Please provide relatively detailed descriptions of two or more substantial writing or speaking tasks that are included in the course requirements

   Students have substantial writing and speaking tasks in the following work.
   - Technical presentation where students must research a topic, write a presentation and then deliver the presentation to the class.
   - Professional responsibilities paper where students write a 5-6 page essay on an issue in computing ethics and the responsibilities of a computing professional
   - Individual summary report and peer evaluation where students review and critique the work done by their peers and themselves, evaluate the results and then write a summary of the work.

   Details on the work are included CSE486 Description of Student Work.

ASU - [L] CRITERIA

2. **Also:**

Please **circle, underline,** or **otherwise mark** the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading

C-3

ASU - [L] CRITERIA

YES	NO		Identify Documentation Submitted
X		**CRITERION 4:** These substantial writing or speaking assignments should be arranged so that the students will get timely feedback from the instructor on each assignment in time to help them do better on subsequent assignments. *Intervention at earlier stages in the writing process is especially welcomed.*	CSE 486 Description of Student work

1. Please describe the sequence of course assignments--and the nature of the feedback the current (or most recent) course instructor provides to help students do better on subsequent assignments

   All work is graded. Feedback is provided to the student in all work except the participation and peer feedback and the exit exam questions. In particular, the results on the first presentation analysis are returned in a timely fashion to allow the students to improve on work on the second analysis. In addition, as this is a two semester sequence, feedback from the first semester presentations can be used to help students improve their presentation skills for the second semester.

2. **Also:**

Please **circle, underline,** or **otherwise mark** the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading

C-4

Course Prefix	Number	Title	General Studies Designation
CSE	486	Computer Science Capstone Project II	L

Explain in detail which student activities correspond to the specific designation criteria.
Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
C1	50% of the course grade is determined by individual work that involves writing. In addition, a large part of the team work also involves writing.	The list of required class work totaling at least 50% is on the CSE 486 syllabus under Individual Work.
C2	There are several assignments where students must research, gather evidence and reflect on the results.	The following assignments require the students to gather information and analyze the results. 1. Technical presentation 2. Participation and peer feedback 3. Presentation analysis essays 4. Individual summary report and peer evaluation Descriptions on each of the assignments is given on the CSE 486 Description of Student Work
C3	There are three assignments of substantial size involving writing or speaking tasks.	The following assignments are of substantial size and weight toward the student grade. The total weight of these assignments is 35% of the grade. 1. Technical presentation 2. Individual summary report and peer evaluation 3. Professional responsibility essay Descriptions on each of the assignments is given on the CSE 486 Description of Student Work
C4	Feedback is provided on most work to allow for students to improve on later work.	Feedback is provided on following assignments. 1. Technical presentation 2. Individual summary report and peer evaluation 3. Professional responsibility essay 4. Presentation analysis In addition, the presentation analysis feedback from the first analysis should help the student performance for the second analysis. Descriptions on each of the assignments is given on the CSE 486 Description of Student Work

CSE 486 Computer Science Capstone Project II
Spring 2015

Dr. Debra Calliss
BYENG 524
debra.calliss@asu.edu
Office hours: Tuesday and Thursday 1:00 – 4:00 PM

Catalog Description: Second course in capstone sequence for computer science majors continuing the development, process, technical skills, teamwork and communication.

Text: None

Organization: This class is organized as a hybrid course so work is divided between in-class, online and team work. Attendance is expected and participation counts toward your grade. In addition to the scheduled class meeting, you are to view online materials and complete all required assignments. You will work on a team in a development effort and are expected to commit 6-8 hours per week toward your team's deliverables. Your team is to meet at least once per week and, in addition, you are to meet with your project sponsor at least once every two weeks.

Work Breakdown:

Team Work Whenever possible, effort is made to differentiate your contribution from the other members of your team. This means that you may not receive the same grade as your teammates.
- Team summary report 10%
- Semester presentations (interim and final)10%
- Meeting minutes 5%
- Results evaluation 20%

Note – The final team presentation is recorded for grading and documentation purposes.

Individual Work As this class is classified as Literacy and Critical Inquiry, at least 50% of your grade must be based on your individual work in oral and written communication.
- Technical presentation 10%
- Exit exam
  - Short answer 5%
  - Essay questions 5%
- Participation and peer feedback 5%
- Presentation analysis 5%
- Professional responsibility essay 10%
- Individual summary report 10%
- Peer Evaluation 5%

C1

CSE 486 Description of Student Work
Supplement to CSE 486 Spring Syllabus

As indicated on the CSE 486 Spring 2015 syllabus, over 50% of the grade is earned from individual work. This document describes each of the assignments and evaluation of the work.

Technical presentation (10% of the grade)

C3

Description:
Each student is required to research a contemporary, technical topic related to computing and make a presentation to the class. The content must be of an adequate technical level for their peers to learn about the topic. This is not a tutorial or a sales presentation. The presentation cannot be taken from another class or another event.

The length of the presentation is 10 minutes, not including questions. No demonstrations or videos may be included.

Content must be organized in the ABC format but must include:

C2

       1. Discussion of references
       2. Motivation for choosing topic
       3. What was learned by creating the presentation and what method was used to learn the material
       4. What the presenter wants the audience to learn from the presentation

Grading and Feedback:
Students are graded on delivery, preparation, technical content, slide creation, and timing. A portion (20%) of the grade is determined by peer feedback.

Grading results and suggestions for improvement are provided by the instructor and anonymous peer evaluations. The feedback is provided to the students one week after the presentation. Also, this is the second semester that the students create and make a presentation and are provided feedback.

C4

Participation and peer feedback (5% of the grade)

C2

Description:
Students are required to attend the presentations made by the other students in class. Each student critiques and completes an evaluation for two students. The evaluation consists of two parts. The first is feedback to the presenter on delivery, preparation, technical content, slide creation. The second is a reflection on the topic and noting of the learning methods. In addition, students are scheduled to answer questions to the presenters.

Grading:
Grading is based on completeness of work submitted and usefulness of feedback.

Presentation analysis (5% of the grade)

C2

Description:
All students are assigned to ask questions of and to analyze two presentations. Each presentation analysis is a 1-page essay including:
- Introduction including topic, presenter's name and dated.
- Describe of the topic of the presentation. Briefly research the topic that was presented and provide a summary.
- Compare and contrast the presentation's content to what was found in the brief research.
- Discuss the significance and impact of the presented topic.
- Describe the presentation's style, including strengths and weaknesses.
- Discuss the learning style of the presentation – how did the presenter appear to learn about the topic, what was effective, and is there anything that could be done to improve,
- Concluding thoughts.

Grading and Feedback:
Students are required to write an analysis for two students. Feedback is given on both the papers related to content and writing style. Feedback is given in a timely manner to allow the students to improve on the second analysis.

C4

Exit exam (5% of the grade)

Description:
Towards the end of the semester, students take an exit exam covering multiple topics in the major. The exam is used as part the accreditation process (ABET).

Half of the exam consists of essay questions covering lifelong learning, computing ethics, impacts of a computing solution and professional responsibilities.

Grading:
Grading is based on content and clarity of writing.

Professional responsibility paper (10% of the grade)

C3

Description:
Students are required to investigate and evaluate on an issue in computing ethics and the responsibility of a computing professional. The assignment is to then write the findings and analysis in a paper of 5-6 pages in length.

Grading and feedback:
Grading is done and feedback is provided to the students based on writing style and thoroughness of topic coverage.

C4

Individual summary report and peer evaluation (15% of the grade)

C2

Description:
The students work in teams to develop a program or system over two semesters. As a team, they write a report on the project results. In addition to this, each student writes a summary report including an analysis of the results of the team. Also included in the report is an analysis of the student's own contributions, lessons learned by the student as well as suggestions for his/her own improvement on both working with others and the production of work products. In addition, each student is required to evaluate his/her peers on a team. This includes a critique of the work produced and the behavior of the peer. This review is confidential and is used in the determination of teamwork grades.

C4

Grading and feedback:
Grading is done and feedback is given based on the completeness of the work submitted and the professionalism in presenting the content.