Application for New Course

1. Submitted by the College of Engineering  
   Department/Division offering the course: Computer Science  
   Date: August 1, 2000

2. Proposed designation and Bulletin description of this course:  
   (a) Prefix & Number: CS 684  
   (b) Full Title: Special Topics in Vision, Graphics and Multimedia  
       (Subtitle required)  
       Abbreviated Title (≤ 24 characters): Topics in Vis & Gphics  
   (c) Lecture/Discussion hours per week: 3  
   (d) Laboratory hours per week: 0  
   (e) Studio hours per week: 0  
   (f) Credits: 3  
   (g) Course description:  
       Advanced topics in computer graphics, computer vision, and multimedia systems.  
       Specific topics include but are not limited to: isophotes, volume rendering, displacement  
       mapping, geographic information systems (GIS), remote sensing topics, large scale  
       sensor networks, video and audio encoding, visualization, immersive environments, and  
       multimedia interfaces.  
    
   (h) Prerequisites (if any): Prerequisites: Consent of instructor.  
    
   (i) May be repeated to a maximum of: up to 6 credit hours, with no more that 3 in the  
       same topic.

4. To be cross listed as:  
   Signature of cross-listing chair: 

5. Effective date: Fall 2001

6. Course to be offered:  
   Fall  
   Spring  
   Summer  
   X

7. Will the course be offered annually; explain if not: Yes

8. Why is the course needed? This course covers new material in an emerging scientific  
   area. No coverage of this topic is currently offered in the Computer Science curriculum.

9. (a) By whom will the course be taught? Brent Seales or Chris Jaynes

   (b) Are facilities for teaching this course now available? Yes  
       If not, what plans have been made for providing them?

10. What enrollment may reasonably be expected? 15

    FEB 14 2001
11. Will this course serve students in the Department primarily? Yes
   Will it be of service to a significant number of students outside the Department? No
   If yes, under what area?
12. Check the category most applicable to this course:
   _ traditional; offered in corresponding departments elsewhere;
   _X relatively new, now being widely established;
   _ not yet found in many (or any) other universities
13. Is this course part of a new proposed program? No
    If yes, which?
14. Will adding this course change the degree requirements in any programs? No
    If yes, explain:
15. Attach a list of the major teaching objectives of the proposed course and outline
    and/or a reference list to be used: See attached
16. If the course is a 100-200 level course, please submit evidence (e.g., correspondence)
    that the Community College System has been consulted.
    Not applicable
17. Within the Department, who should be contacted for further information about the
    proposed course?
       Name: Brent Seales       Phone: 257-6750

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1Approval of this course will constitute approval of the program change unless other program modifications are proposed.
Signatures of Approval:

Department Chair: [Signature] Date: 11/14/2005
Dean of the College: [Signature] Date: 2/18/01

Date of Notice to the Faculty: 1/30/01

Undergraduate Council²: __________________________ Date: ________
University Studies²: __________________________ Date: ________
Graduate Council²: [Signature] Date: 9/5/01
Senate Council²: __________________________ Date: ________

Date of Notice to the University Senate: ________

Action other than approval: __________________________

²If applicable, as provided by the Rules of the University Senate
**Needed Skills**
Solid foundation in graphics, vision, image processing and multimedia.
Other required skills will depend on a specific topic chosen for the course.

**Learning Outcomes**
Mastery of main notions discussed in the course. Familiarity with the current literature in the topic area. Strong preparation for doing independent research work in the topic area. Familiarity with research conducted by the faculty instructor.

**Week by Week Course Outline**
Will depend on the topic and will be announced by the faculty instructor as early as possible but at least one month before. A significant portion of the course should be devoted to a study and discussion of recent research papers in the area of the topic.

**Examinations and grading**
Exact details about examinations and grading in this course will be determined by the instructor offering the course. Details will be made available in the syllabus at the start of each semester in which the course is offered.

**Possible Textbooks**
Research monographs, research papers provided by the faculty instructor, other notes prepared by the faculty instructor.