

FORM B
REQUEST FOR ADDITION OF A NEW COURSE

I. Course Identification

- a. Proposed prefix and number: CS 585
- b. Proposed title: Critical Analysis of Instructional Software
- c. Proposed catalogue description: This course examines the instructional and educational value of commercially available software for the pre-k through 12th grade. The course builds upon a foundation of instructional theory to identify appropriate characteristics of instructional software and explores the effectiveness of instructional software in the classroom. This course may not be counted toward the M.S. in Computer Science.
- d. Credit hours: 3
- e. May course be repeated for credit? No
- f. Maximum number of credit hours that can be earned: 3
- g. Is the proposed course writing enhanced? (applies only to undergraduate courses) No
- h. Prerequisites:
 - i. Course prerequisite: CS 583 Educational Multimedia
 - ii. Classification prerequisite: Graduate standing
 - iii. Semester hour prerequisite: None
 - iv. Companion course: None
- i. Identify the majors and/or minors this course will be required for: Master of Education in Instructional Technology
- j. Identify the majors and/or minors this course will be an elective for: M.A. in Mathematics Education

II. Statement of Need and Program Compatibility

- a. Explain in detail why this course is needed (including how the proposed course will support the present program curriculum).

This course examines commercial educational software and 'edutainment' with respect to its suitability for use in an educational setting. Drawing from an understanding of educational theory and from research into good practice, students will analyze current educational software for quality of content adequacy and accuracy, engagement and instructional effect. It is important that classroom teachers develop and apply a systematic approach to the analysis of educational software to both identify and filter out the weakest commercial products as well as understanding the strengths and purposes of retained products.

The course connects to and extends CS 583 Educational Multimedia in that the same theoretical and praxis grounding and quality issues apply to commercial software as to locally developed materials. Both courses center on the integration of appropriate technology in the curriculum.
- b. Explain how the addition of this course will directly or indirectly influence subsequent changes in the curriculum.

This is a required course in the proposed Master of Education in Instructional Technology
- c. Are courses with similar titles of similar contents currently offered in other departments? If yes, explain how this course is different. Identify representatives from departments offering courses with similar titles or contents that have been made aware of, and have discussed this proposed course.

No
- d. Identify who is likely to be the instructor of this course and the impact of this new course on the departmental teaching assignments.

Dr. Peter Cooper. This course may also be taught by graduate faculty in the College of Education. This course will be taught once in a two-year cycle as part of a cohort program within the College of Education. The pattern of scheduling and the student characteristics are such that this course will most likely be taught in a summer session.

III. Course Content

a. List the course objectives:

At the end of this course the ideal student will be able to:

- A. Describe the instructional theory underpinning specific commercial educational software products.
- B. Develop a working set of criteria for the systematic evaluation of educational software.
- C. Locate and evaluate research in the analysis of educational software.
- D. Identify appropriate uses of specific educational software within the middle school and high school curriculum.

b. Identify the proposed text(s) for the course (include author, title, date):

Author	Title And Publisher	Year
Reigeluth, C.M. & Merrill, D..	Instructional Design Theories and Models: A New Paradigm of Instructional Theory.	1999
Hannafin, M.J. & Peck, K.L.	Design Development and Evaluation of Instructional Software	1997

c. Using a 15 week class schedule, identify the topics to be covered during each week of the semester:

Week 1	Computers and software in schools: Evaluation, review, selection and assessment of software. Thinking, talking and writing about instructional software.
Week 2	Availability of software for education. Educational software versus 'Edutainment' software. Sources of software for schools.
Week 3	Educational theory and software. Identifying theoretical perspectives. Theory and practice.
Week 4	Checklists for educational software assessment. Representative checklists. Criticism of the checklist approach. Validity of the checklist approach.
Week 5	Case Study 1: Behaviorism in instructional software.
Week 6	Theory and checklists in curriculum areas. Using checklist to assess science and art curricula.
Week 7	Classification of instructional software. Classification by application type, educational role and educational rationale. A critical reflection of software classification.
Week 8	Research in instructional software design.
Week 9	A Perspective interactions paradigm for studying educational software. The perspective interactions paradigm. Definitions of the paradigm The characteristics of the perspectives interaction paradigm.
Week 10	Case Study 2: Cognitivism in instructional software.
Week 11	Research in instructional software criticism.
Week 12	Different perspectives. The teacher and student perspective. The designer and student perspective. The designer and teacher perspective.

Week 13	Case Study 3: Constructivism in instructional software.
Week 14	Applying instructional software to the curriculum.
Week 15	Theory and checklists in curriculum areas. Using checklist to assess mathematics and language arts curricula.

IV. Information on the Availability of and Need for Equipment and Library Resources required for the Course.

- a. In order for the Library to better meet the needs of students who will enroll in this course, please indicate the types of resources you expect the students to use. This section is to help the Library review the adequacy of the collection and plan for future allocation of resources to support this course.

Check all that apply:

<i>Types of print/electronic library resources needed</i>	
Scholarly, Peer-Reviewed Journals	x
Popular Magazines	
Newspapers	
Trade Journals	
Books	x
Electronic Databases	x
Audio Visual	
(other)	Instructional Software

- b. Please identify **specific** resources for this class that are not available in the Library. These resources could include but are not limited to journals (both print and electronic), encyclopedias, dictionaries, books, and electronic databases.
None
- c. Identify the need for and the availability of equipment and technological resources.
Not Applicable

After this form has been completed, contact a Bibliographer/Librarian to complete the Library Collection Review (LCR) form. The LCR form should be attached to Form B before the proposal is forwarded to your College Curriculum Committee.

LIBRARY COLLECTION REVIEW for PROPOSED COURSE

Proposed Course Prefix and Number: CS 585

Proposed Title: Critical Analysis of Instructional Software

1. Results of the librarian's review of the adequacy of library holdings to support the proposed course content areas and assignments. Please be specific, and indicate whether the subject areas of the course require new expenditures, or are already included in the collection due to library support of courses with similar information needs.

2. Identify additional resources that are likely to be needed, and the approximate cost of the materials.

3. Bibliographer's comments (state any concerns regarding the library's support of the course).

Signed: _____ Date: _____
Bibliographer

Signed: _____ Date: _____
Library Director