FORM B
REQUEST FOR ADDITION OF A NEW COURSE

I. **Course Identification**
   a. Proposed prefix and number: ACC 582
   b. Proposed title: Information Systems Auditing and Assurance
   c. Proposed catalogue description:

   This course provides the linkage between auditing concepts and processes and information system principles, processing, and control. The use of the computer as an audit tool is introduced through actual operation of Generalized Audit Software such as is currently used in practice. In addition, this course provides students with both an understanding and hands-on familiarity with skills necessary to assess controls over computerized information systems and to accomplish computer assisted auditing procedures to render an opinion regarding the integrity of financial information produced by those systems. Knowledge of these concepts will help prepare the student to practice in a technologically enhanced auditing environment.

   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: ACC 381 and ACC 481
   > **ii.** Classification prerequisite: graduate standing and admission to the five-year accounting program
   > **iii.** Semester hour prerequisite: none
   > **iv.** Companion course: none

   i. Identify the majors and/or minors this course will be required for: Accounting five-year MBA and MS Finance majors.
   j. Identify the majors and/or minors this course will be an elective for: none

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).

   Two developments have greatly expanded the audit and assurance responsibly of auditors as it relates to information systems. One development, the increased use of technology to record, process, and report financial data, has altered the way in which audits must be conducted, altered the nature of the data examined during an audit, and increased the technology skills needed by auditors. The other, passage of the Sarbanes Oxley Act in response to recent accounting scandals, has place an increased burden on auditors to not only provide assurance on reported financial data but also to attest to the veracity of the information systems that process and report that data. Accounting education programs have lagged behind the increasing use of technology in relation to the conduct of audits. Computer Aided Audit Tools and Techniques are necessary to extract and examine financial data and assist in the assessment of internal control over those systems. Existing auditing and accounting information systems courses are at capacity in addressing basic auditing standards and procedures and accounting system concepts. This course is needed to provide the linkage between auditing concepts and processes and information system principles, processing, and control. The use of the computer as an audit tool will be introduced through actual operation of Generalized Audit Software such as is currently used in practice. In addition, the provisions of Sarbanes Oxley require auditors to attest to the internal controls over the client's financial information systems. Given that the majority of these systems are computerized, auditors must understand the elements of internal control in computerized systems and be

able to directly test and evaluate those controls. This course will provide students with both an understanding and hands-on familiarity with skills necessary to assess controls over computerized information systems and to accomplish computer assisted auditing procedures to render an opinion regarding the integrity of financial information produced by those systems. Knowledge of these concepts will help prepare the student to practice in a technologically enhanced auditing environment. Therefore, these skills and that understanding must be adequately addressed in the accounting curriculum.

b. Explain how the addition of this course will directly or indirectly influence subsequent changes in the curriculum.

Graduate students enrolled in the five-year accounting program are pursuing the qualifications to sit for the Uniform CPA Examination. Recently that examination has increased testing in the areas of information systems auditing and internal control. The content of this course will be articulated with the existing auditing and accounting information systems courses in the curriculum in order to ensure the appropriate curriculum coverage of the auditing component of the examination.

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.

Ross Quarles, PhD, CPA is the likely instructor for this course. Existing teaching assignments are ACC 581 Graduate Auditing and ACC 595 Business Process Integration Using ERP Systems. The addition of one section of this new course would not affect the departmental teaching assignments.

III. Course Content
    a. List the course objectives:

1. To provide students with knowledge and understanding of the auditing processes and concepts necessary to provide assurance regarding accounting information systems
2. To provide students with an understanding of the impact of internal controls on the auditing and assurance process related to information systems
3. To provide students with skill and practice in utilizing Computer Aided Audit Tools and Techniques to extract, evaluate, and report data used in the audit process
4. To provide students with experience in planning, conduting, and reporting the results of information systems audits through case situations.

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

Author	Title And Publisher	Year
Hall and Singleton	Information Techlology Auditing and Assurance, 2nd Edition, Thompson - Southwestern	2005
Hunton, Bryant, and Bagranoff	Core Concepts in Information Technology Auditing	2004
Arens	Computerized Auditing Using ACL Software (practice cases) , Armond Dalton Publishers	2004

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

Week 1	Auditing, Assurance, and Internal Control – types of audits, audit risks, and internal control; Sarbanes Oxley – requirements for assessment of internal control, Section 404 provisions and attestation
Week 2	Legal and Ethical Issues for Systems Auditors – irregular and illegal acts, regulatory and legal issues, SOX impact; Information System Risks and Controls – identifying business, audit, security, and continuity risks, assessing information system risks, identifying and documenting system
Week 3	Computer Operations – operating and system-wide controls; IT Deployment Risks – strategic plans, managing development projects, implementing software applications; Systems Development and Maintenance Activities – systems development life cycle, controlling and auditing the SDLC
Week 4	Data Management Systems – flat file and database approach, centralized and distributed environments, controlling and auditing data management systems
Week 5	System Networks and Related Risks - network and technology systems, risks to network and telecommunications systems, network and telecommunications security, auditing network security, privacy violations, audit implications of XBRL, continuous auditing
Week 6	Enterprise Resource Planning Systems – OLTP vs OLAP systems, ERP systems configuration, data warehousing, risks associated with ERP implementation, implications for control and auditing; Introduction to SAP R/3 and processing case
Week 7	Fraud and Forensic Auditing – understanding fraud, responsibilities to detect fraud, factors contributing to fraud, red flags, SAS 99 provisions, fraud schemes, fraud detection techniques, computer forensics, forensic auditor's tool kit
Week 8	Computer Assisted Audit Tools and Techniques (CAATTS) – application controls, testing application controls, audit productivity software, generalized audit software tools, computer assisted system audit techniques
Week 9	CAATS for Data Extraction and Analysis – data structures, embedded audit modules; ACL software – familiarization, filters and commands, short cases and problems, generating reports
Week 10	Demonstration Cases: using ACL in the audit of inventory, using ACL in the audit of accounts payable
Week 11	Auditing the Revenue Cycle in a Computerized Environment – overview of revenue cycle and revenue cycle technologies, audit objectives, controls, and tests of controls, substantive test of revenue cycle accounts
Week 12	Auditing the Expenditure Cycle in a Computerized Environment – overview of expenditure cycle technologies, expenditure cycle objectives, controls, and tests of controls, substantive tests of expenditure cycle accounts
Week 13	Case: Johnson Automotive – Payroll Audit Project
Week 14	Case: Northwest Electronics - Inventory Audit Project
Week 15	Case: Ronstad Metal Company – Accounts Receivable Audit Project

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:

Types of print/electronic library resources needed	
Scholarly, Peer-Reviewed Journals	none
Popular Magazines	none
Newspapers	none
Trade Journals	none
Books	none
Electronic Databases	none
Audio Visual	none
(other)	

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.

   The Dow Technology Demonstration Center in the Smith-Huston Building contains all of the electronic databases, equipment, and other technological resources required for this class.

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: ACC 582
Proposed Title: Information Systems Auditing and Assurance

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