HIST 4890. Civil Rights in the United States. 3 hours. Surveys the history of American civil rights movements from 1865 to the present, with special attention to the 1945–1968 period. Analyzes the background of the modern civil rights movement; the goals and strategies of its participants and those who opposed it; the role of the federal government in creating reforms; and the enduring importance of the movement in contemporary America.

**HIST 4900-HIST 4910. Special Problems.** 1–3 hours each. Prerequisite(s): consent of department.

HIST 4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

## **Honors College**

### **Honors Courses, HNRS**

HNRS 1000. Honors College Seminar: Intellectual Heritage. 1 hour. Explores the intellectual heritage and foundation on which students build as they progress academically. Includes lectures from a variety of disciplinary perspectives; students have opportunities to discuss important intellectual concepts. Prerequisite(s): admission to Honors College.

HNRS 1100. The Good Society. 3 hours. Human beings form social groups to meet their common needs, such as order and infrastructure. For thousands of years, thoughtful people have asked questions about the nature of these human societies. This course explores questions of ongoing interest and importance, including how good societies deal with poverty, illness, education, environmental issues and criminal behavior. Human rights, biodiversity and war are also considered. Takes an interdisciplinary approach to the study of these topics, and seeks to provoke critical thought rather than offer answers. Prerequisite(s): admission to the Honors College.

HNRS 1500. Introduction to Research: An Interdisciplinary Perspective. 3 hours. Interdisciplinary lecture course on the basic principles of research in physical and life sciences, social sciences, humanities, and the performing arts. In addition to learning to apply basic research methods to a specific research topic, students discuss ethics and values in research, safety issues, intellectual property rights, and funding and publication issues. Prerequisite(s): admission to Honors College.

HNRS 2900. Special Problems. 1-3 hours.

HNRS 3500. Honors Thesis Proposal Development. 3 hours. Students develop a thesis proposal, including identification of a research topic, review of relevant literature and/or theory, formulation of hypotheses or research questions where relevant, addressing ethical and safety issues, developing a research budget, and developing a timeline for the research. Students should identify a thesis advisor in their major before the beginning of the course. Prerequisite(s): admission to Honors College and completion of 12 hours in honors courses.

HNRS 4000. Honors Capstone Seminar: Global

**Perspectives.** 3 hours. The Capstone Seminar is the final course for students enrolled in the Honors College. Students explore various issues of global importance. Prerequisite(s): good standing in the Honors College and completion of at least 12 semester hours of honors courses.

HNRS 4100. Honors Colloquium, 3 hours. Interdisciplinary colloquium on various topics of significant interest. Prerequisite(s): acceptance to Honors College

interest. Prerequisite(s): acceptance to Honors College and upper-division standing or consent of college. May be repeated for credit as topics vary.

HNRS 4900. Special Problems. 1-3 hours.

HNRS 4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

## Human Service Management and Leadership

see Rehabilitation, Social Work and Addictions

## Information Science

see Graduate Catalog

# Information Technology and Decision Sciences

### **Business Computer Information Systems, BCIS**

BCIS 2610 (BCIS 1305 or BCIS 1405). Introduction to Computers in Business. 3 hours. A study of the introductory concepts of computing in business; basic computer components, computer history and programming. Prerequisite(s): MATH 1100 or higher.

BCIS 3610. Basic Information Systems. 3 hours. Theory, capabilities, applications, benefits, liabilities and economics of business computer information systems. Using the computer to solve business problems. Management information systems and computer-based decision support emphasized. Use of standard support application packages. Prerequisite(s): BCIS 2610.

BCIS 3615. Visual Display of Business Information.

3 hours. Explores the use of visual display techniques and tools in the creation of electronic business documents and presentations. Stresses development of good written and oral presentation skills, as well as familiarity with a wide range of multimedia tools. Prerequisite(s): BCIS 2610 or equivalent.

BCIS 3620. File Concepts and Procedures. 3 hours. An introduction to COBOL programming in the business environment. Emphasis on the fundamentals of structured program design, development, testing, implementation and documentation of common business-oriented applications

using COBOL. Coverage of language syntax, data and file structures editing, report generation, data validation, basic file processing and an introduction to batch and interactive JCL. Prerequisite(s): BCIS 2610 or equivalent; a grade of C or better in each previously taken BCIS course, or consent of department; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT).

BCIS 3630. Object-Oriented Programming for Business. 3 hours. Introduction of abstract data types, inheritance, object identity, polymorphism as they relate to building business objects and business classes; use of Java programming language depicting the object orientation concepts; use of class libraries and Java packages for business object construction. Prerequisite(s): BCIS 2610 or equivalent; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course; or consent of department.

BCIS 3680. Enterprise-Oriented Programming. 3 hours. Concepts of enterprise-level Java development such as graphical interfaces, JavaBeans, database services, and distributed systems as they relate to building object-oriented applications at the enterprise-level. Prerequisite(s): BCIS 3630; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 3690. Information Systems Concepts. 3 hours. Concepts of advanced COBOL programming: computer utilization, business applications, data structures, information systems research potential and software design on interactive systems. Topics include structured designs, software development tools, advance file processing, utilities, OS and interactive JCL, report writer, debugging, sorting and other advanced COBOL language features. Prerequisite(s): BCIS 3620; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4610. Analysis of Business Information Systems. 3 hours. An integrated perspective of the problems in today's information systems environment, concentration on contemporary design methodologies and considerations unique to users of computers and information systems. Topics include current systems analysis, modular design, development and implementation, documentation, project planning and task definition, and other systems analysis topics. Prerequisite(s): BCIS 4620; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4620. Introduction to Database Applications. 3 hours. Analysis of file organization techniques and data structures. Consideration of the management of data as a resource. Design of data models and databases in business organizations. Use of database management systems and user-oriented data languages. Prerequisite(s): BCIS 3610 and BCIS 3630; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4630. Fundamentals of Information Technology Security. 3 hours. Introduction to the security systems development life cycle and its effects on application development, software engineering, traditional systems analysis and networking. Examines the various components of information privacy and security. Prerequisite(s): BCIS 4610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4640. Administrative Problems in Information Systems. 3 hours. Advanced analysis of business information systems. An integrated investigation of business computer information systems programming and systems development concepts. Use of project management methodologies, concentration on tools and techniques, formal presentations and group dynamics. Prerequisite(s): BCIS 4610 and BCIS 4620; ACCT 2010 and ACCT 2020 with grades of C or better; ECON 1100 and ECON 1110; MATH 1100; MATH 1190 or equivalent; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4650. Visual Programming for Business Applications. 3 hours. Business application design and development from the perspective of visual programming technologies. Emphasis on performance characteristics and user interface design considerations. Prerequisite(s): BCIS 4620; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4660. Decision Systems Design. 3 hours. Investigates model-based approaches to the design of decision systems for business and industry. Prerequisite(s): BCIS 3610; ACCT 2010 and ACCT 2020 with grades of C or better; DSCI 3710 or DSCI 3870; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS and DSCI course, or consent of department.

BCIS 4670. Continuing Seminar in Computer-Based Information Systems. 3 hours. A seminar on current topics in business computer information systems. Examines state-of-the-art issues associated with the design, development, implementation, control and management of business computer information systems. Prerequisite(s): BCIS 4620; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4680. Distributed Systems and Teleprocessing. 3 hours. This course develops an understanding of the differences between centralized, decentralized and distributed data processing systems; their relationships with the business enterprise, data communications and the parameters affecting the implementation of the system; provides background for analysis, design, selection and evaluation of hardware, software and support required for a distributed data processing environment. Prerequisite(s): BCIS 4620; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4690. Information Technology Management. 3 hours. Overview of the management of an organization's information assets. Emphasizes techniques and issues specific to information systems department management; the development, implementation and operation of computer-based information systems; as well as personnel, career management, assessment, legal, ethical, global and societal issues. Prerequisite(s): BCIS 4610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department; completion of all other business foundation courses with a grade of C or better and senior standing. BCIS degree majors must take this course within 12 hours of graduation.

BCIS 4700. Problem Solving and Decision Making Process. 3 hours. Study of the process of decision making, and the information requirements of decisions; decision support system tool selection and DSS applications development. Prerequisite(s): BCIS 4610 or BCIS 4660 or ACCT 4100; 2.5 UNT GPA (2.5 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4710. Object-Oriented Methodologies. 3 hours. Examines the object-oriented paradigm and the analysis and design of information systems using object-oriented approaches. Prerequisite(s): BCIS 4610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4720. Web-Based Information Technologies. 3 hours. Provides tools, skills, and an understanding of technology, business concepts and issues that surround the emergence of electronic commerce. In addition to acquiring basic skills for navigating the Internet and creating a personal electronic presence on the World Wide Web (WWW), the student develops an understanding of the current practices and opportunities in electronic publishing, electronic shopping, electronic distribution, and electronic collaboration. The student also explores several of the problem areas in electronic commerce such as security (authentication, privacy), encryption, safeguarding of intellectual property rights, acceptable use policies, and legal liabilities. Prerequisite(s): BCIS 3630 and BCIS 4610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4740. Administration and Policy in Information Security. 3 hours. Investigates the major concepts and techniques used in client-server systems architecture and information security, beginning with a strategic planning process for security. Subjects include security practices, security architecture and models, continuity planning and disaster recovery planning. Prerequisite(s): BCIS 4610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

BCIS 4800. Cooperative Education. 1–3 hours. Supervised work in a job related to student's career objective. Prerequisite(s): BCIS 3620 or BCIS 3630; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); student must meet the employer's requirements, and have consent of the department chair or BCIS undergraduate coordinator. Pass/ no pass only, and cannot be used as a support course.

BCIS 4900. Special Problems. 1–3 hours. Prerequisite(s): BCIS 2610 or equivalent; ACCT 2010 and ACCT 2020 with a grade of C or better; ECON 1100 and ECON 1110; MATH 1100; MATH 1190 or equivalent; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course or consent of department.

BCIS 4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

#### **Decision Sciences, DSCI**

DSCI 2710. Data Description and Analysis with Spreadsheets. 3 hours. Collection, description and analysis of numerical data. Data presentation, tables, charts and graphs, descriptive statistics, analysis of time series and index numbers, sampling techniques and distributions, estimation, confidence intervals, with applications in quality control and productivity. Satisfies the Mathematics requirement of the University Core Curriculum.

**DSCI 2870.** Basic Operations Research. 3 hours. Quantitative methods of analyzing business problems; survey of cost, volume and profit analysis; inventory and production models, and linear programming; game theory; network analysis. Prerequisite(s): completion of mathematics requirement.

DSCI 3710. Business Statistical Analysis Using Spreadsheets. 3 hours. Statistical inference for means and proportions, analysis of variance, correlation, simple and multiple regression. Extensive use of cases and spreadsheets. Prerequisite(s): DSCI 2710 with a grade of C or better; ACCT 2010 and ACCT 2020 with grades of C or better; ECON 1100.

DSCI 3870. Management Science. 3 hours. Introduction to operations research for business decision making. Spreadsheet methods are used to evaluate the following: deterministic models; allocation problems, linear programming, sequencing and scheduling, and network models. Prerequisite(s): DSCI 2710 or consent of instructor; ACCT 2010 and ACCT 2020 with grades of C or better; ECON 1100 and ECON 1110; MATH 1100; MATH 1190 or equivalent.

DSCI 4510. Model-Based Decision Support Systems.

3 hours. How model-based decision support systems can be utilized as a key element within a managerial decision process. Attention is paid to how and why such a model is used in a support system environment. Topics include the use of mathematical, statistical and business models that are embedded within a decision support system for dealing with both structured and semi-structured decision problems. Prerequisite(s): DSCI 3870; BCIS 3610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken DSCI course, or consent of department.

DSCI 4520. Data-Based Decision Support Systems. 3 hours. Knowledge discovery in large databases, using data mining tools and techniques. Topics include data exploration, modeling and model evaluation. Decision making in a case-embedded business environment is emphasized. Prerequisite(s): DSCI 3710; BCIS 3610; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken DSCI course, or consent of department.

DSCI 4700. Problem Solving and Decision Making Process. 3 hours. Study of the process of decision making and the information requirements of decisions; decision support systems tool selection and DSS applications development. Prerequisite(s): BCIS 4660 or ACCT 4100 or LSCM 3960 or MGMT 3830; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken DSCI course, or consent of department.

DSCI 4900. Special Problems. 1-3 hours.

DSCI 4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

**Information Technology and Decision Sciences, ITDS** – see *Graduate Catalog* 

Management Science, MSCI – see Graduate Catalog

## **International Studies**

#### International Studies, INST

INST 2100. Introduction to International Studies. 3 hours. Introduces students to the six areas of concentration of the major—international politics and security, international business and economics, international development, regional studies, Africa and the Middle East, and peace studies. Prerequisite(s): international studies major or minor status, or consent of department.

INST 4800. International Studies Internship. 3 hours. Students seek supervised work-related internships to any of the areas of concentration in the international studies major. The internship aims at the advancement of the student's professional field of study and career objectives. Prerequisite(s): international studies major status; junior or senior classification; minimum GPA of 3.0 and 6 upper-level hours in the student's primary area of concentration at UNT; student must meet employer's requirements and have consent of department internship supervisor. May be repeated for credit; up to 6 hours of internship may count towards the major. Pass/no pass only.

INST 4850. International Studies Seminar. 3 hours. Topics vary and may cover any of the six areas of concentration of the major: international politics and diplomacy, international business and economics, international development, area studies, international security, and peace and human rights issues. Students explore issues that affect our world in the 21st century. May be repeated for credit as topics vary.

INST 4851. International Security. 3 hours. Examines the causes of war, the impact of the spread of nuclear weapons upon regional and world stability, transnational terrorism, and causes of world and regional instability. Prerequisite(s): senior status and international studies major with area of concentration in international security and diplomacy.

INST 4852. Critical Issues in Global Economics Senior Seminar. 3 hours. Explores contemporary global economic issues including the restrictions on trade, the relationships between exchange rates and the flows of goods, fiscal and monetary policy in open and closed economy, international debt crisis, foreign direct investment, economic regional integration, and the roles of international economic organizations. Prerequisite(s): senior status and international studies major with area of concentration in international business and economics.

INST 4853. International Studies. 3 hours. Explores competing perspectives for development and various factors which explain why some countries are more developed than others. Survey of global challenges such as environmental, foreign aid, gender empowerment, international migrants, refugees and indigenous people, the role of culture and religion in development, and corruption and public sector reform. Prerequisite(s): international studies majors whose area of concentration is international development and regional studies and senior status.

**INST 4900-INST 4910. Special Problems.** 1–3 hours each. Prerequisite(s): consent of department.

INST 4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

## **Italian**

see Foreign Languages and Literatures

## **Japanese**

see Foreign Languages and Literatures

## **Jazz Studies, Music**

see Music

## **Journalism**

#### Journalism, JOUR

JOUR 1210 (COMM 1307). Mass Communication and Society. 3 hours. Principles of mass communication including historical, economic, social, ethical and legal factors influencing the operation and content of the mass media. Impact of new technology in changing the media. A survey of mass communication areas (newspapers, magazines, advertising, public relations, television, wire services, Internet and networks), and careers they offer. Satisfies a portion of the Understanding the Human Community requirement of the University Core Curriculum.

JOUR 2010 (COMM 2327). Principles of Advertising. 3 hours. Economic and social aspects, research, creative functions, media, production, and federal laws affecting advertising; fundamentals of advertising copy, layout and presentation techniques.