4560. Therapeutic Recreation Program Planning. 3 hours. Study of current practices used in therapeutic recreation service design and delivery. Examines various service delivery systems, models of therapeutic recreation, and standards of practice. Emphasizes a systematic approach to individualized and comprehensive therapeutic recreation planning.

4760. Facilitation Techniques in Therapeutic Recreation. 3 hours. In-depth study and application of facilitation techniques for clients in therapeutic recreation programs. A review of various techniques including leisure education, transactional analysis, reality therapy, behavior modification, values clarification, assertiveness training, relaxation therapy, reality orientation, remotivation, activities therapies and therapeutic relationships.

4800. Studies in Recreation. 1–3 hours.

4900. Special Problems. 1–3 hours.

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.

Language
see Foreign Languages and Literatures

Latin
see Foreign Languages and Literatures

Learning Technologies

Applied Technology, Training and Development, ATTD – see *Graduate Catalog*

Computer Education and Cognitive Systems, CECS – see *Graduate Catalog*

Learning Technologies, LTEC

1100. Computer Applications. 3 hours. Introduction to computer usage. Integrated approach to software tools such as word processing, data-base management, spreadsheet, communications and graphics applications.

2100. Surviving the Information Age. 3 hours. A collegiate guide to Internet resources and information procurement. Topics include: connecting to UNT resources, peripheral selection and use, tips for purchasing and using application software, an overview of graphics software, applications of the Internet, HTML code, methods of establishing an Internet connection, netcasting, voice and video conferencing, PC-based troubleshooting techniques, electronic research, and information processing using the Internet. Prerequisite(s): LTEC 1100, or equivalent.

3010. Personal Development. 3 hours. Course provides opportunities for students to develop themselves professionally. Special emphasis is placed on image development for a chosen career and strategy development to launch that career. Time management, money management, business etiquette, selecting mentors and role models are also addressed.

3220. Computer Graphics in Education and Training. 3 hours. Application of computer graphics to the preparation of multimedia and web-based materials. Includes principles of graphics communication, concepts in computer graphics, graphics input systems, graphics manipulation software, and graphics output systems. Prerequisite(s): LTEC 1100.

3260. Web Authoring. 3 hours. Creation of web-based materials incorporating text, graphics, and multimedia elements. Emphasis on use of standards-based technologies for creating content for web-based delivery. Prerequisite(s): LTEC 3220.

3440. Technology and the Teacher. 3 hours. Introduction to class presentation and teacher productivity systems, including graphic, audio, video and computer-based materials. Laserdiscs, videotapes, LCD systems and computer software for the classroom. Prerequisite(s): LTEC 1100.

3530. Data Communications. 3 hours. Foundational skills in data communications. Covers the basics of computer networking, including terms and concepts, contemporary network services, transmission media, and protocols. Students learn how protocols are used in networking implementations from many vendors, especially those most common in today's LANs and WANs.

4000. Principles of Training and Development. 3 hours. Investigates the design, delivery and evaluation of training and development programs. The relationship of modern technology and training theories are addressed.

4070. Principles of Leadership, Empowerment and Team Building. 3 hours. The nature and scope of leadership and empowerment as it relates to applied technology and industrial training environments; the techniques for leadership, empowerment and team building are emphasized. Prerequisite(s): junior standing or consent of department.

4100. Computers in the Classroom. 3 hours. Computers in education; computer topics covered in introductory and secondary school courses. Motivation and objectives in computer education; some programming language. Instructional uses of the computer, topics in curriculum integration. Prerequisite(s): LTEC 1100.

4110. Instructional Design in Career and Technical Education. 3 hours. Development and use of resources for preparing contextual learning and instruction, presenting lessons and assessing learner performance. Strategies for infusing employability skills, work-based learning and applying instructional technology.

4120. Instructional Strategies in Career and Technical Education. 3 hours. Basic instructional techniques and media commonly utilized in applied technology, training and development; emphasis is placed on illustrated presentations and technical demonstrations.

4121. Technical Presentation Skills. 3 hours. Emphasis on technical presentation skills and electronic presentation media commonly utilized in training and development. Topics such as developing an audience profile, arranging facilities, topic introduction techniques, questioning and summary strategies are addressed.

4130. Professional Responsibilities and Management in Career and Technical Education. 3 hours. Examines the role and responsibilities of career and technical education professionals as well as the importance of creating a classroom and laboratory environment that fosters a positive learning climate. The role and responsibilities of career and technical education professionals as well as technology applications, effective time management, standards for student conduct and teacher liability are addressed.

4140. Work-Based Learning in Career and Technical Education. 3 hours. Study of the basic standards and recent changes in work-based learning. Emphasis is placed on developing materials to effectively facilitate the work-based learning component of a workforce education program.

4160. Advanced Computer Applications in Education and Training. 3 hours. Course is designed as an advanced preparation for students preparing to enter organizations in education or training that utilize modern computer-based technologies that include: graphic applications, telecommunications, networking, programming and computer-based training. Prerequisite(s): LTEC 4300.

4200. Performance Improvement in Education and Training. 3 hours. Introduction to the history, theory and practice of human performance technology in education and training. Explores the systemic process of analysis, intervention development, change implementation and process evaluation involved in performance improvement.

4210. Digital Multimedia in Education and Training. 3 hours. Production of multimedia materials using digital video and audio production techniques. Project management teams, instructional design, editing techniques, digitizing, using a video camera, and production/post-production techniques are covered. Prerequisite(s): LTEC 3220.

4230. Directed Occupational Internship in Industry or Training. 1–3 hours. (2000 clock hours equals one year of experience or 8 semester credit hours.) Supervised individual work experience in a recognized occupation or field of specialization. Prerequisite(s): consent of department. For those who meet the necessary state-mandated requirements for years of work experience these credits can be granted for successful completion of an occupational competency examination. May be repeated up to 24 hours of credit.

4300. Computer Applications in Education and Training. 3 hours. Two broad areas of applications (occupational and educational) are discussed and demonstrated. Course focuses on an integration of software packages in a project-oriented, real-world environment. Course is primarily hands-on with students working extensively on the computer and related hardware. Prerequisite(s): LTEC 1100 or equivalent.

4340. Office Information Processes. 3 hours. Course combines skills of hardware and software use with an introduction to teaching methods needed to teach those skills to students in the K–12 office education classroom. Prerequisite(s): LTEC 4300.

4360. Desktop Publishing in Education and Training. 3 hours. Course emphasizes the application of desktop publishing theory and practices in education and training. Course utilizes desktop publishing software to create technical brochures, advertisements, newsletters and other publications in the industrial training organization or educational environment. Prerequisite(s): LTEC 4300.

4435. History and Principles of Applied Technology. 3 hours. A study of the historical development, founding principles and objectives of applied technology programs in the United States; focus on the types of programs, general organization and methods of delivery.

4440. Advanced Instructional Strategies. 3 hours. Emphasis on advanced instructional techniques; including questioning, discussion, problem-solving, motivation, and instructional development used in applied technology and industrial training setting. Prerequisite(s): COMM 1010 or LTEC 4120 or consent of department.

4470. Human Relations in Business, Education and Industry. 3 hours. A study of the components of human relations and interpersonal communication factors in business, education, trade and industrial education and training programs.

4490. Serving Learners from Special Populations in Applied Technology Programs. 3 hours. Introduction to identification, assessment, instructional and curriculum modifications, support services and evaluation of learners from special populations (e.g. disadvantaged, disabled and limited English-speaking) in applied technology programs.

4510. Communications in Business, Education and Industry. 3 hours. Important factors in succeeding on the job. Emphasis is placed on communication, strategies for conducting meetings and seminars, conflict management, developing and arranging agendas, itineraries, minutes and business reports, designing and using business graphics, and job-getting communication.

4550. Network Systems Administration. 3 hours. Study of file and print network services in a directory services environment. Topics include server configuration, user management, resource allocation, risk management, and disaster recovery. Prerequisite(s): LTEC 3530.

4560. Internet Services Administration. 3 hours. Design and implementation of Internet information services including FTP, NNTP, World Wide Web and streaming media. Conferencing using H.323 and T.120 standards-based systems. Students both design and build various information services using representative software tools and hardware platforms.

4740. Instructional Internship in Applied Technology and Training. 3–6 hours. Supervised observation and instructional practice in an approved applied technology program or industrial training environment; discussion and evaluation seminars are scheduled. Prerequisite(s): consent of department. May be repeated for credit.

4741. Applied Technology and Performance Improvement Capstone. 3 hours. A capstone course designed for students to synthesize the knowledge, skills and attitudes learned throughout the undergraduate degree in Applied Technology and Performance Improvement. Students will demonstrate their ability to articulate career pathways, apply technology in the workplace, and contribute to the organizational structure of either business and industry or education. Prerequisite(s): This course may only be taken during the final term/semester of the ATPI professional development sequence.

4800. Studies in Education. 1–3 hours each. Organized classes for program needs. Prerequisite(s): consent of department. Limited-offering basis. May be repeated for credit.

4830. Practicum, Field Problem or Internship. 3 hours. (1;0;6) Supervised professional activities in computer education. May be repeated for credit.

4900-4910. Special Problems. 1–3 hours each. Prerequisite(s): consent of department. May be repeated for credit.

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.

Library and Information Sciences

Library and Information Sciences, SLIS

4000. Introduction to Information Professions. 1 hour. History, roles and scope of information professions and practice. Basic concepts and issues including impact of information technology on the individual, intellectual freedom, privacy and diversity. Course activities emphasize team building and leadership skills. Internet-based instruction.

4080. Research Methods and Evaluation. 3 hours. Research principles and techniques; role of theories and hypotheses; experimental and non-experimental research; measurement and data collection; analysis and interpretation; quantitative methods and applications; problems in formulating research proposals and evaluating representative studies.

4090. Practice Work in Information Agencies. 3 hours. Supervised practice work and field study (120 clock hours minimum) in a cooperating learning resources center or information agency, plus seminar conferences and summary report. Prerequisite(s): 12 hours of prior courses in the school and application early in prior term/semester. For students without prior field experience. Pass/no pass only.

4095. Cooperative Education. 3 hours. Supervised work in a job related to student's career objective. Prerequisite(s): consent of the practicum director and the cooperative education advisor. Pass/no pass only. Cannot be used for degree credit.

4200. Basic Information Organization. 4 hours. Basics of information organization and presentation for facilitating access. Concepts and problems of human information behavior, classification and categorization related to information organization. Database technology, structure and design. Standards for information organization, data representation and information exchange. Systems for organizing information and facilitating information access in various information use environments.

4205. Introduction to Indexing and Abstracting. 3 hours. Applications in different types of information systems and agencies. Use of database retrieval software. Indexing language formulation, macros programming, and design for user support. Planning and implementing representative programs. Prerequisite(s): SLIS 4200 or consent of school.

4208. School Library Organization and Media. 3 hours. Cataloging and classification of print and nonprint collections. MARC records. School library automation systems and their management. Media and media services, including services special to populations. Representative problems and library experiences. Prerequisite(s): SLIS 4000 or consent of school.

4210. Information Organization and Records Control. 3 hours. Descriptive cataloging, subject analysis, classification and control of information resources of all kinds; Anglo-American Cataloguing Rules; Dewey Decimal and Library of Congress classification systems; subject headings; organization, functions and use of catalogs and classification systems; principles of information indexing and retrieval; use of bibliographic databases; representative problems and practice. Prerequisite(s): SLIS 4200 or consent of school.

4230. Records Management Operations. 3 hours. Management operations for records control and use; preparation, organization, storage, retrieval and dissemination. Preservation, security and disposal problems. Planning and supervising records management programs. Departmental functions and organization. Data-processing applications and online systems.

4300. Administration of Information Agencies. 3 hours. Role, functions and development of principal kinds of information centers and agencies. Management principles and practices; standards and evaluation; resources and services; facilities and equipment; planning, staffing and reporting; public relations; budgeting and financial procedures; policy making; social contexts and backgrounds; professional perspectives.

4400. Evaluation and Development of Information Resources. 3 hours. Principles and techniques of selecting and acquiring information resources of all kinds; development and maintenance of collections; criteria and selection aids; national and trade bibliographies; online searching; publishers and publishing; censorship problems and intellectual freedom; representative problems and practice.

4420. Information Resources for Children. 3 hours. Survey of print and nonprint materials, including multicultural/multiethnic materials; utilization practices and selection; curricular correlations and enrichment; recreational and developmental needs; children's services and programs; wide reading and use of literature and other materials for children from preschool through middle-school years.

4430. Information Resources for Young Adults. 3 hours. Survey of print and nonprint materials, including multicultural/multiethnic materials; utilization practices and selection; curricular correlations and enrichment; recreational and developmental needs; young adult services and programs; wide reading and use of literature and other materials for young adults from upper middle school through high school years.

4600. Basic Information Access and Retrieval. 4 hours. Basic principles and techniques of information retrieval and access services. Survey of research in information seeking behavior and user interaction. Introduction to systems of access, search and retrieval skills, and collection management. Study of evaluation methods for all formats of resources, services, and user satisfaction.

4615. Electronic Information Services. 3 hours. Basic concepts of electronic information services and databases in different fields; conducting online searches and evaluating services. Supervised practical experience. Prerequisite(s): SLIS 4600 or consent of school.

4620. Information Resources in the Humanities. 3 hours. Information resources, methods and services to meet access needs in the humanities. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice. Prerequisite(s): SLIS 4600 or consent of school.

4630. Information Resources in Sciences and Technology. 3 hours. Information resources, methods and services to meet access needs in science and technology. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice. Prerequisite(s): SLIS 4600 or consent of school.

Courses of Instruction