Information and Communication Technology Courses (IT)

IT 502 Organizational Development (3)
The purpose of this course is to look at the principles and the nature of the organizational development field, and dominant methods, models and perspectives taken to conduct this work.

IT 503 @Team Building (3)
This course focuses on working closely with colleagues in productively academic and business environments. Effective team leadership and membership principles will be covered. Psychodynamic and organizational inhibitors and facilitation of effective team functioning also will be reviewed. Fall.

IT 505 Organizational Communications (3)
This course examines the structure and nature of communications within an organization and underlying factors affecting internal flow of information, the methods employed in distribution of information and the relationship of problem solving procedures and inflow of information, policy formulation and information dissemination.

IT 506 Small Group Communication (3)
The purpose of this course is to analyze the concepts and theories of dynamics and provide the opportunity to assess and develop group process consultation skills. Fall (odd years).

IT 515 Managing Innovation (3)
This course explores the concepts that are basic to the creation and implementation of new ideas and technologies. It also identifies the skills needed to accomplish visions for the future.

IT 518 Computers in Education (3)
This course presents an introduction to varied computer applications in education. Students receive knowledge of and experience with computer-aided instruction, word processing, and spreadsheet software. Emphasis is placed on understanding the role of computer technology in elementary classrooms. No previous computer experience is required. This is an introductory course for both elementary education and secondary education students. Summer, Fall and Spring.

IT 529 Computer Applications/Performance Improvement (3)
Students will explore the use of computers as a tool for instructional applications in education. Word processing, database management, spreadsheet creation, and presentation software will all be covered. Internet-based communications tools will also be emphasized. Emphasis will be placed on developing practical applications for education settings in a cross-platform environment. Prerequisite: basic word processing, mouse skills, some internet experience, to be augmented by jumpstart classes if these skills are lacking. Intermediate-level course.

IT 544 Desktop Publishing (3)
The course will emphasize the understanding of message design concepts and principles in the pre-publication process. Students will design and develop publications using text design techniques. Students will produce newsletters, informational flyers, brochures, and other materials. Introductory course.

IT 545 Preparing and Delivering Professional Presentations (3)
The purpose of this course is to prepare students to design, develop and deliver professional presentations. In this course students will utilize paper and electronic resources for the production of presentation materials. Topics of user interface design, audience characteristics and message design will be covered.

IT 546 Preparing Performance Support Materials (3)
This course provides a comprehensive overview of the computer-based preparation of instructional materials. Students will become familiar with principles of message design and the guidelines that pertain
to creating instructional materials on a computer. Using a range of software and multimedia applications, students will design and develop such materials as informational pamphlets, handouts, worksheets, tests, overhead transparencies and web pages. Students will have the opportunity to apply their knowledge and understanding of course concepts in a series of assignments and a final project.

**IT 549 Web Page Development (3)**
The course is intended to provide students with experience in web page design and development. The course will emphasize the understanding of the design principles and hypertext markup language used to create web sites. Students will work with a variety of media, such as audio, video, text, and graphics to exploit the personal computer's ability to present information through the Internet. Introductory course.

**IT 552 Computer Graphics (3)**
This course is a survey of various computer graphic types and applications, including still graphics, log creation, desktop publishing, motion graphics, animation, and video production. This is an introductory course that serves as an introduction to computer graphics for ICT majors, as well as a technology elective for non-majors. Fall.

**IT 566 Simulations and Games for Teaching and Learning (3)**
This course will explore the use of simulations and games for instructional environments. Both computer-based and non-computer based options will be covered. This course is intended for both K-12 educators, as well as those interested in corporate training. Introductory course.

**IT 601 Staff Development (3)**
This course examines issues concerning staff development and training programs in adult and higher education settings. Ideas supported by professional literature and examples from current and past practice will be reviewed in order to design and develop programs that will train, incentivize and maintain a highly skilled staff. Fall/Spring.

**IT 602 Human Resources (3)**
This course explores human resource management issues facing managers. It will emphasize acquisition, retention, development and appraisal of efficient and productive workforce and human capital as investment. It will also deal with managing human resources from the viewpoint of the organization within the restriction of rules and employment laws.

**IT 603 Policies, Issues, and Ethics for Professional Practice (3)**
This course examines the formulation and implementation of organizational policy through the lens of ethical values. Ethical choices within organizational cultures and context will be explored.

**IT 605 Network Architecture (3)**
This course will examine telecommunications fundamentals including data, voice, image, and video and the concepts, models, architectures, protocols, standards, and security for the design, implementation, and management of digital networks. Essentials of local area networks (LAN), metropolitan area networks (MAN), and wide area networks (WAN) will be examined. Regulatory and technical environments also will be reviewed. Spring.

**IT 607 Principles of Leadership (3)**
This course reviews issues and themes in the exercise of influence, power and authority by individuals within small and large groups and among groups in the context of an organization. Fall (odd years).

**IT 609 Conflict Resolution (3)**
This course focuses on dealing effectively with conflict within organizations. The emphasis will be on the importance of principled negotiation and resolution of conflict as well as conflict as a normal part of organizational and interpersonal relationships.

**IT 610 Change Processes (3)**
This course looks at models of change process, diffusion and implementation strategies and the skills needed to create and implement new ideas and technologies. Spring.

**IT 614 Technology in Education (3)**
This course is a survey of various technologies, both computer based and non-computer based, for use in instructional settings. Topics covered include sound capture and editing, video capture editing, computer graphics, applied learning theories, and various other technologies. Students will receive hands-on instruction in each area, and will create a project in each of these areas which reflect a theory of learning. Intermediate level – not an introductory level course.

**IT 615 Critical Issues in Performance and Leadership Technology (3)**
This course is intended to examine sociological and philosophical problems with the implementation of technological innovations in performance improvement settings. Topical areas will include implications of the use of selected learning theories, systematic processes, evaluation techniques and theories. Prerequisites: IT 635 plus three other IT courses. Advanced level. Fall (even years).

**IT 619 Authoring and Scripting for Multimedia (3)**
The goal of this course is to help students acquire a working knowledge of Macromedia Flash authoring environment. Emphasis will be placed on understanding the problem solving skills associated with production relating to business and/or educational products reflecting a client’s needs. Intermediate level – not an introductory level course. Prerequisite: Permission of ICT Department. Fall (odd years).

**IT 623 Programming and Authoring for the Internet (3)**
The course will cover advanced web page development through the use of html and a variety of programming and authoring tools including JavaScript, and XML. Emphasis will be placed on the effective use of these tools to create interactive web pages. Summer.

**IT 625 History and Philosophy of Technology Utilization (3)**
This course is designed to help graduate students understand the rationale and development of the instructional technology movement in the United States during the last century. The implications for teaching and learning from various educational philosophies and theories will be analyzed and investigated as they relate to current practices in performance technology. Prerequisites: IT 635 plus three other IT courses. Spring.

**IT 635 Research & Theory on Communication and Performance Technology (3)**
This course explores current research and theory in the field of performance technology. Topics covered will be concerned with development and design theory, practices and procedures, including content structure, course organization, course sequence, and instructional strategies. It will include locating and interpreting information from published reports and using research to explore questions related to performance technology. Fall (odd years).

**IT 639 Network Management (3)**
The course is intended to provide graduate students in technology programs with a conceptual background and initial experience in computer network installation and management. The course will emphasize the nature and structure of both local area networks and wide area networks involving a variety of computer platforms and operating systems. Students will develop an understanding of how to work with networking hardware and software, and to plan, select, install, manage, and maintain computer-based telecommunications networks including configuring and customizing the operating systems of computers and computer networks in various settings. Intermediate level – not an introductory level course. Fall.

**IT 647 Technology Coaching (3)**
This course explores leadership styles that influence the teaching and training of professionals. Students will explore the dimensions of personality, temperament, and coaching models to develop appropriate learning strategies for adults (adragogy).
IT 648 Principles of Performance Technology (3)
The purpose of the course is to develop an understanding of new ways of doing business by encouraging professionals to approach their work with broader, multi-disciplinary perspectives. Students will be exposed to work in performance analysis, information support, knowledge management, appraisal and other important themes and interventions.

IT 649 Advanced Web Page Development (3)
This course is intended to provide students with practical experience in web page design and development. The course will emphasize the understanding of the extensible hypertext markup language, CSS and WYSIWYG editors to create web sites. Students will manipulate graphics to achieve professional-level results to exploit the personal computer’s ability to present information through the internet. Advanced level.

IT 650 Seminar in Performance and Communication Technology (3)
Seminars addressing topics and issues meeting the special needs of school systems, groups of teachers, or others interested in the study and application of technology for performance improvement.

IT 651 Systematic Design For Performance Improvement (3)
This is a course for educators interested in designing performance improvement systems, from classroom/lecture to individualized instruction. Students will explore the various components of the instructional design process including content analysis, sequencing, goal analysis and instructional strategies as they develop instructional sequences. Prerequisite: IT 635 recommended. Spring.

IT 652 Computer Graphics (3)
Students will produce computer graphics and integrate them into various computer applications. Topics include producing graphics, storyboarding, animation, resolution, commercial graphics, and integration of graphics into print and the world wide web. Intermediate level – not an introductory course. Prerequisite: Permission of ICT Department.

IT 653 Instructional Planning & Development Process (3)
This course involves students in practical training in instructional planning and development. Emphasis will be placed on understanding the relationship between planning and development theory and practice. The course will provide an opportunity for students to examine the planning process in the context of instructional environments.

IT 654 Program Evaluation (3)
This course involves students in practical training in program evaluation. Topics will include audience identification, evaluation design, question formulation, data gathering, analysis, reporting and meta-evaluation. Prerequisite: IT 635 recommended.

IT 655 Video Design & Production (3)
This course involves students in practical training in the use of video equipment for instructional applications. Students will study the theoretical rationale behind video design and utilization, as well as receive hands-on instruction in the use of video equipment. Summer.

IT 656 Multimedia Production (3)
This course involves students in practical training in multimedia production. An emphasis is placed on the integration of a variety of delivery systems in the production of instructional products. Students will examine the use of a variety of media, including audio, video, text, and graphics to produce instructional multimedia products. Prerequisites: one technology course with approval of adviser; also recommended: IT 621 or IT 652. Advanced level.

IT 657 Practicum in Technology (3)
This course provides students in the ICT program an opportunity to synthesize technology knowledge and skills. Each student works in a selected field setting to improve the use of technology. Working from an approved plan of action, the student works with field staff, maintains a log of activities and accomplishments, and submits a final report. Prerequisites: Permission of instructor and at least 5 IT courses.

IT 658 Needs Assessment (3)
This course will provide students with a look at the ideas and practices that should take place when decisions are first being made about instructional or program development. Students will focus on how they can use these concepts and skills in different work applications, from developing classes and preparing to implement State standards to analyzing organizations and institutions. In addition to presenting ideas and skills this course will provide an opportunity to analyze and practice them. Prerequisite: IT 654.

IT 659 Technology Product Development (3)
The purpose of this course is to provide students with the opportunity to apply the skills and knowledge that they have acquired from other courses in the instructional technology program into one complete project. Working from an approved plan, students will produce an electronic web portfolio in Taskstream as well as a customized presentation portfolio created outside Taskstream. Class meetings will provide students the opportunity to share work in progress and elicit and provide feedback from their colleagues and the instructor. Taken in final semester of coursework.

IT 660 Seminar in Performance and Communication Technology (3)
Seminars addressing topics and issues meeting the special needs of school systems, groups of teachers, or others interested in the study and application of technology for performance improvement.

IT 661 Advanced Systematic Design (3)
This course offers educators interested in applying Instructional Design Principles to curriculum, units and lessons. The focus throughout the course will be on practical applications of Instructional Design in K–12 settings.

IT 662 Simulations and Games (3)
This course will provide students with a look at the ideas and practices that should take place when decisions are first being made about instructional or program development. Students will focus on how they can use these concepts and skills in different work applications, from developing classes and preparing to implement State standards to analyzing organizations and institutions. In addition to presenting ideas and skills this course will provide an opportunity to analyze and practice them. Prerequisite: IT 654.

IT 663 Distance Education (3)
This course will introduce students to the history, research, practice and potential of distance education. Current controversies and problems such as increasing drop-out rates, questions of course ownership, and lack of interaction will be discussed and solutions proposed in a hands-on manner making use of online computer conferencing. Spring (even years).

IT 664 Internship (3)
This course emphasizes strategies for managing technology infrastructure, supporting training development and managing knowledge dissemination within organizations. In addition to regular class meetings, field work will be required. Prerequisites: At least 5 IT courses.

IT 665 Project Development (3)
The purpose of this course is to provide students with the opportunity to apply the skills and knowledge that they have acquired from other courses in the instructional technology program into one complete project. Working from an approved plan, students will produce a project specific to their needs. Class meetings will provide students the opportunity to share work in progress and elicit and provide feedback from their colleagues and the instructor. Taken in final semester of coursework.

Special Education Courses (SPED)

SPED 501 Foundations in Autism (3)
This course will address the identification and needs of students with Autism and related spectrum disorders and ongoing assessment techniques for the purposes of designing appropriate teaching strategies.