INSTRUCTIONAL TECHNOLOGY (ITEC)

ITEC 39525 EDUCATIONAL TECHNOLOGY 3 Credit Hours
Develops knowledge and skills in designing, implementing, and assessing learning experiences, using various digital tools and resources to support teaching, learning, and research.
Prerequisite: CULT 29535.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 40093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL MEDIA 1-4 Credit Hours
(Repeatable for credit) (Slashed with ITEC 50093) Variable topic workshop designed to respond to curriculum trends and issues and specialized needs. S/U graded.
Prerequisite: Special approval.
Schedule Type: Workshop
Contact Hours: 1-4 other
Grade Mode: Satisfactory/Unsatisfactory

ITEC 47411 DESIGNING VISUALS FOR INSTRUCTION 3 Credit Hours
Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media including print, video, computer-based technology. Presentations lab activities.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 47413 DIGITAL VIDEO IN EDUCATION 3 Credit Hours
(Cross-listed with ITEC 57413 and ITEC 77413) Students learn how to produce their own video programs, beginning with the planning and scripting process, developing camerawork and audio recording skills, and editing the final production. They also learn how to obtain footage in the field and work with other participants. In addition, the use of video for instruction is explored, with an emphasis upon how it can be effectively integrated into curricula and used to enhance lessons in dynamic ways.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 47427 TECHNOLOGY AND LEARNING 3 Credit Hours
Overview of technology used in education. Focuses on implementing and facilitating learner-centered curriculum with computer technology. Students develop web-based instructional materials.
Prerequisite: none.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 47430 COMPUTER APPLICATIONS IN EDUCATION 3 Credit Hours
Preparation for use of computers effectively in a variety of educational settings. Students should have some expertise with computers. Focus on advanced applications in education. Macintosh and Windows.
Prerequisite: none.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 47495 SPECIAL TOPICS: EDUCATIONAL MEDIA 1-5 Credit Hours
(Repeatable for credit) Specialized offering in response to emerging or selected program needs in educational media and instructional design.
Prerequisite: none.
Schedule Type: Lecture
Contact Hours: 1-5 lecture
Grade Mode: Standard Letter

ITEC 47496 INDIVIDUAL INVESTIGATION IN EDUCATIONAL MEDIA 1-5 Credit Hours
(Repeatable for credit) Directed independent reading and/or research of special interest or need in student’s program. Planned with and directed by a faculty member.
Prerequisite: none.
Schedule Type: Individual Investigation
Contact Hours: 1-5 other
Grade Mode: Satisfactory/Unsatisfactory

ITEC 50093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL MEDIA 1-4 Credit Hours
(Repeatable for credit) (Slashed with ITEC 40093)
Prerequisite: Grading standing and special approval.
Schedule Type: Workshop
Contact Hours: 1-4 other
Grade Mode: Satisfactory/Unsatisfactory

ITEC 57400 SELECTION AND UTILIZATION OF EDUCATIONAL MEDIA 3 Credit Hours
Discusses principles and techniques in the selection and utilization of media for instructional purposes.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 57402 ORGANIZATION AND ADMINISTRATION OF EDUCATIONAL MEDIA PROGRAMS AND CENTERS 3 Credit Hours
Examines the planning, organizing, administering and evaluating of educational media programs and centers.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 57411 DESIGNING VISUALS FOR INSTRUCTION 3 Credit Hours
Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media, including print, video, computer-based technology. Presentations, lab activities.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
ITEC 57413  DIGITAL VIDEO IN EDUCATION  3 Credit Hours
(Cross-listed with ITEC 47413 and ITEC 77413) Students learn how to produce their own video programs, beginning with the planning and scripting process, developing camerawork and audio recording skills, and editing the final production. They also learn how to obtain footage in the field and work with other participants. In addition, the use of video for instruction is explored, with an emphasis upon how it can be effectively integrated into curricula and used to enhance lessons in dynamic ways.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 57427  TECHNOLOGY AND LEARNING  3 Credit Hours
Overview of technology used in education. Focuses on implementing and facilitating learner-centered curriculum with computer technology. Students develop web-based instructional materials.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 57430  COMPUTER APPLICATIONS IN EDUCATION  3 Credit Hours
Preparation for use of computers effectively in variety of educational settings. Students should have some expertise with computers. Focus on advanced applications in education. Macintosh and Windows.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 60199  THESIS I  2-6 Credit Hours
(Repeatable for credit)Master of arts students must register for at least one semester of Thesis I under the supervision of an adviser.
Prerequisite: Grading standing and special approval.
Schedule Type: Masters Thesis
Contact Hours: 2-6 other
Grade Mode: Satisfactory/Unsatisfactory-IP

ITEC 60299  THESIS II  2 Credit Hours
(Repeatable for credit)If 6 credits of Thesis I have been completed, M.A. students must continue to register each semester under Thesis II until all degree requirements are met.
Prerequisite: ITEC 60199 and graduate standing.
Schedule Type: Masters Thesis
Contact Hours: 2 other
Grade Mode: Satisfactory/Unsatisfactory-IP

ITEC 67403  INSTRUCTIONAL DESIGN  3 Credit Hours
Enables students to design and develop instructional systems and materials using a systematic and research- and theory-based instructional design model.
Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 67410  SIMULATION-GAMES IN EDUCATION  3 Credit Hours
Provides students with opportunities to explore simulation and games as a strategy for learning. Experiences in both group role-playing simulations and computer simulations will be included.
Prerequisite: Graduate standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 67420  RESEARCHING CURRENT ISSUES IN INSTRUCTIONAL TECHNOLOGY  3 Credit Hours
Exploration of significant current issues in the field of instructional technology, including latest research findings, use of newest technologies, instructional design issues, present state of the field and future directions.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 67425  MANAGING TECHNOLOGICAL CHANGE  3 Credit Hours
Analysis and evaluation of change process are explored, particularly as they relate to use of instructional technology. Management role for facilitating planned change as studied through communication and management models.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 67426  NETWORKING BASIC FOR EDUCATORS  3 Credit Hours
Provides an overview of networking, including client hardware and software typically found in school settings. Topics include networking design, protocols, software and hardware, wireless networking, security and acceptable use, management strategies, desktop client and server configurations, and professional issues for network administrators. Intended for those seeking licensure as K-12 computer/technology coordinators.
Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 67432  DESIGNING MULTIMEDIA FOR INSTRUCTION  3 Credit Hours
Focuses on the design, production and evaluation of computer-assisted instructional materials. Instructional design and research are applied to the development of software.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 67434  EMERGING TECHNOLOGIES  3 Credit Hours
Focus on theoretical foundations, design and development of instructional delivery systems employing leading-edge or emergent technologies. Specific technologies include multimedia, interactive Web-based instruction. Presentations, lab.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
ITEC 67435  VIRTUAL REALITY  3 Credit Hours  
Virtual reality provides promise as a tool for educators. Students will learn to create and evaluate instructional applications. Activities will include actual production of virtual worlds as well as virtual experiences on the Internet.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67436  DISTANCE EDUCATION  3 Credit Hours  
This course explores various approaches to delivering instruction to distant sites and examines a variety of critical issues, such as planning, choice of technology, cost, teaching strategies, evaluation, etc.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67437  WEB DEVELOPMENT FOR EDUCATORS  3 Credit Hours  
Provides an overview of basic website development and management in educational settings. Topics include HTML, cascading style sheets, dynamic webpages and database integration.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67438  INSTRUCTIONAL APPLICATIONS OF THE INTERNET  3 Credit Hours  
Provides knowledge and skills needed to use the Internet effectively in instruction at all levels. Two major concentrations are computer-mediated communications and instructional Web site development.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67439  PORTFOLIO REVIEW  1 Credit Hour  
Students modify projects and products developed in earlier courses to ensure highest quality. Students present results to faculty to show expertise in instructional design, virtual design, multimedia and World Wide Web development.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 1 lecture  
Grade Mode: Satisfactory/Unsatisfactory-IP  

ITEC 67442  DESIGNING ONLINE COURSES  3 Credit Hours  
Online learning and teaching present new challenges for designing high quality instructional experiences for students. This course enables students to design and develop effective online educational materials, interactions and discourses to increase learning in online settings. Students design and develop online materials. Course is presented online.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67444  TEACHING ONLINE COURSES  3 Credit Hours  
(Slashed with ITEC 77444) Course explores using pedagogical approaches appropriate to online learning, including facilitating synchronous and asynchronous discussions, facilitating embedded assessment, enhancing online interactivity, collaboration and community incorporating self-directed learning. Students discuss, analyze and use these strategies in online teaching and learning. Course is presented online.  
Prerequisite: graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67449  RESEARCH IN ONLINE LEARNING  3 Credit Hours  
Course reviews current research issues in online teaching and learning and explores potential new areas of research. Students engage in guided inquiry to identify, understand, apply and critique current research in online learning and to discover and construct new areas. Students participate in a constructive online learning environment. Course is presented online.  
Prerequisite: graduate standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter  

ITEC 67451  SEMINAR: EDUCATIONAL MEDIA  1-4 Credit Hours  
(Repeatable for credit)Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice.  
Prerequisite: Graduate standing.  
Schedule Type: Seminar  
Contact Hours: 1-4 other  
Grade Mode: Standard Letter  

ITEC 67491  ADVANCED PRACTICUM AND INTERNSHIP  1-10 Credit Hours  
(Repeatable for credit) Supervised program requiring application of theory to practice in the use of instructional technology directed by a graduate faculty member and a practitioner in the field. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which internship will take place.  
Prerequisite: Graduate standing.  
Schedule Type: Practicum or Internship  
Contact Hours: 3-33 other  
Grade Mode: Satisfactory/Unsatisfactory-IP  

ITEC 67495  SPECIAL TOPICS IN EDUCATIONAL MEDIA  1-5 Credit Hours  
(Repeatable for credit)Specialized offering in response to emerging or selected program needs in instructional technology.  
Prerequisite: Graduate standing.  
Schedule Type: Lecture  
Contact Hours: 1-5 lecture  
Grade Mode: Standard Letter
ITEC 67496  INDIVIDUAL INVESTIGATION IN INSTRUCTIONAL TECHNOLOGY  1-5 Credit Hours  
(Repeatable for credit)Directed independent reading and/or research of special interest or need in student’s program. Planned with and directed by a graduate faculty member.  
Prerequisite: Graduate standing and special approval.  
Schedule Type: Individual Investigation  
Contact Hours: 1-5 other  
Grade Mode: Satisfactory/Unsatisfactory-IP

ITEC 67498  INDEPENDENT RESEARCH IN INSTRUCTIONAL TECHNOLOGY  1-5 Credit Hours  
(Repeatable for credit)Students pursue an individualized research project on a specialized topic with approval and under direction of instructor.  
Prerequisite: graduate standing.  
Schedule Type: Research  
Contact Hours: 1-5 other  
Grade Mode: Satisfactory/Unsatisfactory-IP

ITEC 77403  INSTRUCTIONAL DESIGN  3 Credit Hours  
Enables students to design and develop instructional systems and materials using a systematic and research- and theory-based instructional design model.  
Prerequisite: doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77410  SIMULATION-GAMES IN EDUCATION  3 Credit Hours  
Provides students with opportunities to explore simulation and games as a strategy for learning. Experiences in both group role-playing simulations and computer simulations will be included.  
Prerequisite: Doctoral standing and special approval.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77411  DESIGNING VISUALS FOR INSTRUCTION  3 Credit Hours  
Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media including print, video, computer based-technology. Presentations lab activities.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77413  DIGITAL VIDEO IN EDUCATION  3 Credit Hours  
(Cross-listed with ITEC 47413 and ITEC 57413) Students learn how to produce their own video programs, beginning with the planning and scripting process, developing camerawork and audio recording skills, and editing the final production. They also learn how to obtain footage in the field and work with other participants. In addition, the use of video for instruction is explored, with an emphasis upon how it can be effectively integrated into curricula and used to enhance lessons in dynamic ways.  
Prerequisite: doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77420  RESEARCHING CURRENT ISSUES IN INSTRUCTIONAL TECHNOLOGY  3 Credit Hours  
Exploration of significant current issues in the field of instructional technology, including latest research findings, use of newest technologies, instructional design issues, present state of the field and future directions.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77425  MANAGING TECHNOLOGICAL CHANGE  3 Credit Hours  
Analysis and evaluation of change process are explored, particularly as they relate to use of instructional technology. Management role for facilitating planned change as studied through communication and management models.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77426  NETWORKING BASIC FOR EDUCATORS  3 Credit Hours  
Provides an overview of networking, including client hardware and software typically found in school settings. Topics include networking design, protocols, software and hardware, wireless networking, security and acceptable use, management strategies, desktop client and server configurations, and professional issues for network administrators. Intended for those seeking licensure as K-12 computer/technology coordinators.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77432  DESIGNING MULTIMEDIA FOR INSTRUCTION  3 Credit Hours  
Focuses on the design, production and evaluation of computer-assisted instructional materials. Instructional design and research are applied to the development of software.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77434  EMERGING TECHNOLOGIES  3 Credit Hours  
Focus on theoretical foundations, design and development of instructional delivery systems employing leading-edge or emergent technologies. Specific technologies include multimedia, interactive Web-based instruction. Presentations; lab.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter

ITEC 77435  VIRTUAL REALITY  3 Credit Hours  
Virtual reality provides promise as a tool for educators. Students will learn to create and evaluate instructional applications. Activities will include actual production of virtual worlds as well as virtual experiences on the Internet.  
Prerequisite: Doctoral standing.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter
ITEC 77436 DISTANCE EDUCATION 3 Credit Hours
This course explores various approaches to delivering instruction to distant sites and examines a variety of critical issues, such as planning, choice of technology, cost, teaching strategies, evaluation, etc.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 77437 WEB DEVELOPMENT FOR EDUCATORS 3 Credit Hours
Provides an overview of basic website development and management in educational settings. Topics include HTML, cascading style sheets, dynamic webpages and database integration.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 77438 INSTRUCTIONAL APPLICATIONS OF THE INTERNET 3 Credit Hours
Provides knowledge and skills needed to use the Internet effectively in instruction at all levels. Two major concentrations are computer-mediated communications and instructional Web site development.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 77442 DESIGNING ONLINE COURSES 3 Credit Hours
Online learning and teaching present new challenges for designing high quality instructional experiences for students. This course enables students to design and develop effective online educational materials, interactions and discourses to increase learning in online settings. Students design and develop online materials. Course is presented online.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 77444 TEACHING ONLINE COURSES 3 Credit Hours
(Replaces 67444) Explores using pedagogical approaches appropriate to online learning, including facilitating synchronous and asynchronous discussions, facilitating embedded assessment, enhancing online interactivity, collaboration and community and incorporating self-directed learning. Students discuss, analyze and use these strategies in online teaching and learning. Course is presented online.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 77449 RESEARCH IN ONLINE LEARNING 3 Credit Hours
Course reviews current research issues in online teaching and learning and explores potential new areas of research. Students engage in guided inquiry to identify, understand, apply and critique current research in online learning and to discover and construct new areas. Students participate in a constructively online learning environment. Course is presented online.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

ITEC 77491 SEMINAR:EDUCATIONAL MEDIA 1-4 Credit Hours
(Repeatable for credit)Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice.
Prerequisite: Doctoral standing.
Schedule Type: Seminar
Contact Hours: 1-4 other
Grade Mode: Standard Letter

ITEC 77492 ADVANCED PRACTICUM AND INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY 1-10 Credit Hours
Supervised program requiring application of theory to practice in the use of instructional technology directed by a graduate faculty member and a practitioner in the field. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which internship will take place.
Prerequisite: Doctoral standing.
Schedule Type: Practicum or Internship
Contact Hours: 3-33 other
Grade Mode: Satisfactory/Unsatisfactory-IP

ITEC 77495 SPECIAL TOPICS IN EDUCATIONAL MEDIA 1-5 Credit Hours
(Repeatable for credit)Specialized offering in response to emerging or selected program needs in instructional technology.
Prerequisite: Doctoral standing.
Schedule Type: Individual Investigation
Contact Hours: 1-5 lecture
Grade Mode: Standard Letter

ITEC 77496 INDIVIDUAL INVESTIGATION IN INSTRUCTIONAL TECHNOLOGY 1-5 Credit Hours
(Repeatable for credit)Directed independent reading and/or research of special interest or need in student’s program. Planned with and directed by a graduate faculty member.
Prerequisite: Doctoral standing and special approval.
Schedule Type: Individual Investigation
Contact Hours: 1-5 other
Grade Mode: Satisfactory/Unsatisfactory-IP

ITEC 77498 INDEPENDENT RESEARCH IN INSTRUCTIONAL TECHNOLOGY 1-5 Credit Hours
(Repeatable for credit)Students pursue an individualized research project on a specialized topic with approval and under direction of instructor.
Prerequisite: doctoral standing.
Schedule Type: Research
Contact Hours: 3 other
Grade Mode: Satisfactory/Unsatisfactory-IP
ITEC 87450  LEARNING WITH INSTRUCTIONAL TECHNOLOGIES  3  
Credit Hours  
Accompanies the Educational Psychology doctoral seminar EPSY 87450: Psychological Principles of Education. Doctoral students are required to take both courses simultaneously. In this ITEC course, students address how technologies can most effectively be used to enhance instruction, based upon current findings about the learning process. Students are also required to develop a research project, which utilizes technology to test theories about learning and instruction.  
Prerequisite: doctoral standing.  
Corequisite: EPSY 87450.  
Schedule Type: Lecture  
Contact Hours: 3 lecture  
Grade Mode: Standard Letter