
Educational Technology

In the College of Education

OFFICE: North Education 280
TELEPHONE: 619-594-6718
FAX: 619-594-6376
<http://edtec.sdsu.edu>

Faculty

Marcie J. Bober, Ph.D., Associate Professor of Educational Technology, Chair of Department (Graduate Adviser)
Brockenbrough S. Allen, Ph.D., Professor of Educational Technology
Bernard J. Dodge, Ph.D., Professor of Educational Technology
Donn C. Ritchie, Ph.D., Professor of Educational Technology
Allison Rossett, Ed.D., Professor of Educational Technology
Farhad Saba, Ph.D., Professor of Educational Technology
Robert P. Hoffman, Ph.D., Associate Professor of Educational Technology
Philip Molebash, Ph.D., Assistant Professor of Educational Technology
Minjuan Wang, Ph.D., Assistant Professor of Educational Technology

Courses Acceptable on Master's Degree Program in Education (EDTEC)

Refer to Courses and Curricula and Regulations of the Graduate Division sections of this bulletin for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES

EDTEC 532. Production of Instructional Materials (3) I

Six hours of activity.

Instructional media production for professionals in organizational settings such as hospitals, law offices, accounting firms, publishing companies. Use of web pages, video, presentation software, and data analysis tools for training. Not open to students in educational technology degree and certificate programs or to students with credit in Educational Technology 541.

EDTEC 540. Educational Technology (3) I, II, S

Six hours of activity.

Rationale, foundations, theories, careers, trends, and issues in educational technology. Implications of educational technology for instruction and information in schools, government, and corporations.

EDTEC 541. Web-Based Multimedia Development (3) I, II, S

One lecture and six hours of laboratory.

Prerequisite: Basic computer literacy.

Systems, aesthetic, and learning theories applied to design of web-based educational multimedia. Planning and prototyping digital media. Not open to students with credit in Educational Technology 532.

EDTEC 544. Instructional Design (3) I, II

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 540 and 541. Meet department Writing Skills Requirement or complete Rhetoric and Writing Studies 503W with a grade of B+ or better.

Systematic design of products for education and training. Use of cognitive task analysis to determine instructional content. Development of instructional goals and product specifications. Rapid prototyping of instructional products.

EDTEC 550. Introduction to Distance Education (3) II

Two lectures and three hours of laboratory.

Prerequisites: Educational Technology 540, 541, 544, or equivalent experience in the field.

Terminology, concepts, instructional strategies, and technologies of distance education. Designing, facilitating, and managing courses at a distance. Overview of social issues, historical perspectives, and current trends. Analyzing distant learner profiles, needs, and skills. Telecommunicating, instructing, interacting, and providing feedback.

EDTEC 561. Advanced Web-Based Multimedia Development (3) I, II, S

Six hours of activity.

Prerequisites: Educational Technology 540 and 541.

Two- and three-dimensional graphics, visualization, animation, digital video, sound, and virtual reality techniques. Research-based guidelines, design languages applied to development of interactive web-based learning systems.

EDTEC 570. Advanced Teaching with Technologies (3) S

Prerequisite: Educational Technology 470 or equivalent work experience.

Design of constructivist lessons and units using Internet resources. Use of visual organizing tools and databases for instruction and assessment. Tools for professional knowledge base organization and electronic portfolios.

EDTEC 572. Technology for Course Delivery (3) I, II, S

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 540 and 541.

Use of technology to support planning, presenting and managing instructor-led courses.

EDTEC 596. Topics in Educational Technology (1-3) I

Selected problems in educational technology. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

EDTEC 640. Psychology of Technology-Based Learning (3)

Six hours of activity.

Prerequisite: Educational Technology 544.

Principles of human learning and cognition applied to design and use of technology-based learning systems. Development of research-based guidelines for designing educational products and services.

EDTEC 644. Advanced Instructional Design (3)

Two lectures and three hours of laboratory.

Prerequisites recommended: Educational Technology 540 and 544.

Roles and theories associated with instructional design. Problem solving on current design issues. Needs assessment and product development for community based clients.

EDTEC 650. Distance Education (3)

Two lectures and three hours of laboratory.

Prerequisites: Educational Technology 550 and 561. Recommended: Educational Technology 572.

Theories and models of tele-education at home, place of work and school. Design, development, and evaluation of instructor-led and learner-directed tele-lessons for integrated electronic dissemination systems. Social, economic and organizational context of learning at a distance.

EDTEC 653. Cyberculture and Learning Systems (3)

One lecture and six hours of laboratory.

Prerequisite: Educational Technology 561.

Narrative, dramatic, artistic, and musical structures in design and analysis of dynamic learning systems.

EDTEC 670. Exploratory Learning Through Simulation and Games (3)

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 540 and 541.

Design, evaluation and use of simulations and games for education and training. Instructional applications of computer-based simulations, interactive fiction, board games and role play.

EDTEC 671. Learning Environment Design (3)

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 544 and 561.

Advanced design of reusable learning objects; usability testing; learning management systems; interface design.

EDTEC 684. Management of Educational Technology (3)

Six hours of activity.

Prerequisite recommended: Educational Technology 544.

Research reviewed and findings related to current practices. Management of instructional design and training projects and programs. Role of educational technology and training in organizations. Recent trends evaluated.

EDTEC 685. Informational and Instructional Technologies for Organizations (3)

Six hours of workshop and activities.

Prerequisites: Educational Technology 540 and 541.

Organizational and informational systems that support instructional products and services. Individual, team, and organizational analyses. Incentives, feedback, coaching, job-aids, selection, knowledge management, and other performance improvement strategies.

EDTEC 700. Seminar in Educational Technology (1-3)

Prerequisite: Educational Technology 540.

Selected areas, topics in educational technology. May be repeated with new content. See *Class Schedule* for specific content. Maximum credit six units applicable to a master's degree.

EDTEC 775. Directed Internship in Educational Technology (2-6) Cr/NC

Prerequisite recommended: Educational Technology 644.

Supervised internship in an educational or training setting. Application to take course must be made during preceding semester.

EDTEC 798. Special Study (1-6) Cr/NC/RP

Prerequisite: Consent of staff; to be arranged with department chair and instructor.

Individual study. May involve fieldwork. Maximum credit six units applicable to a master's degree.
