TECHNOLOGY SYSTEMS (TS)

TS 501 Intro-Computers/Computing Sys (3 credits)

TS 551 Inst Apps: Educational Softwar (3 credits)

TS 552 Instructional Apps:Internet (3 credits)

TS 553 Int To Multimedia In Classroom (3 credits)

TS 554 Advanced Internet Applications (3 credits)

TS 600 Independent Study in Graduate Technology Systems (1-3 credits)

TS 642 Computer Hardware, Troubleshooting and Maintenance (3 credits)
This course provides a foundation in computer hardware and networking technologies. Students will learn to install, upgrade, and optimize computer operating systems and hardware components and use diagnostic software. They will be introduced to networking technologies for local area networks (LANs), wide area networks (WANs), and the Internet. Students will learn to identify the different media used in network communications; distinguish between them and determine how to use them to connect servers and workstations in a network. Students will also learn to differentiate between the networking standards, protocols and access methods; recognize the primary network architectures; identify their major characteristics; and determine which would be most appropriate. Students will use Windows 2000 and Windows NT Workstation as network client operating systems and Windows NT Server as the server operating system.

TS 643 Networking Technologies (3 credits)
Students will design, implement and test network operating systems in homogenous and mixed network environments and will be introduced to advanced TCP/IP configuration. Advanced network security measures such as smart cards, EFS, proxy services and firewalls and advanced network troubleshooting techniques and methodologies will also be covered.

TS 650 Emerging Learning Technologies (3 credits)
This course is a basic introduction to the use of new technologies in the classroom. As an example, the course will deal with Smartphones, and Smart Robots and other new technologies as they emerge. Students will learn how to utilize and implement these new technologies and their associated tools to engage and differentiate for their students. For example, students will explore the use of Smartphones and their apps in the use of emerging their students and having their students develop as autonomous learners and will learn the basics of robotics in order to integrate robotics into existing curricula in ways that engage and deepen understanding.
Course Rotation: Spring

TS 652 Using the Internet as an Instructional Tool (3 credits)
The student will learn to understand the use and value of the Internet as a teaching resource. Students will examine sites that are important to all educators, use search tools to find sites to enhance their own curricular goals, evaluate the quality of online resources, explore the Internet as a communications tool, understand techniques used in educational sites, analyze online lessons and projects, and evaluate their uses in instruction. Students will learn the process of creating a technology-rich lesson, creating Web pages containing standards-based lessons and activities and instruments with which to assess them. Student-created lessons will be posed to the Pace Web site.

TS 653 Web Authoring and Digital Media (3 credits)
This course is designed to provide an introduction to the Internet, Web page creation and video editing using XHTML, a popular HTML editor, a graphics program, a Web authoring program, and a video editing program. Topics include HTML, XHTML, CSS, HTML editors, Web graphics and sound, Web page design concepts, and video creation, editing, and publishing. Students will prepare Web pages that incorporate text, digitized images, and sound, and moves by combining pictures, video clips, and sounds.

TS 654 Designing Standards-Based, Technology-Enhanced Curricula (0-3 credits)
Using the techniques and experiences gained in the previous courses, the student will create a variety of curriculum resources, including lessons, units, class web pages, thematic units, web quests and virtual tours that are enhanced by the Internet and a number of other technology resources. Students will augment their learning with extensive peer review and evaluation of work in development, and will be introduced to online resources that will help them continue to expand their knowledge. Students will explore classroom management issues that relate to technology and will learn to evaluate technology use in the connected classroom. Student-created curricula will be posted to the Pace web site.

TS 660 Special Topics in Technology Systems (3 credits)

TS 660A Topic: End User Information Systems: Designing, Managing, Training (0-3 credits)
Application of theories of adult learning and instructional development to the design, delivery, and evaluation of training for end-user information systems. Topics include needs assessment, instructional design and strategy, implementation management, evaluation and follow-up methods, and evaluation of training strategies.
Course Rotation: TBA.

Prerequisites: 6 credits of Technology Systems.

TS 660B Special Topics: Instructional Design and Training (3 credits)
This course introduces students to organizational training and development as it applies specifically to end-user information systems (EUIS). Students acquire training skills that are grounded in theories of adult learning and instructional development. Topics include needs assessment, instruction design strategy, implementation management, evaluation, and follow-up strategies, along with appraisal of training techniques. Additional topics include the discussion of various learning styles and matching these styles to a variety of training strategies. Students will gain practical experience as they design and deliver short training sessions in class. Class feedback will be provided and students will experience how feedback (immediate evaluation) can be used as a developmental tool for improving training design and delivery.
Course Rotation: TBA

TS 671 Internship in Educational Technology (3 credits)
This internship requires 50 hours of field experiences and an 8-week practica, distributed throughout a K-12 setting. During this experience, candidates will assume increasing responsibility in creating technology-rich curriculum for the K-12 classroom setting.