

Grade Level: K-12



1717 S. Chestnut Ave. Fresno, CA 93702-4709 (800) 372-5505 http://ce.fresno.edu

## **Independent Study Course Syllabus**

Course Titl	le: Technology and School Ad	lministration	
	<i>5</i> ,		
□ Online	X Distance Learning		
Instructor:	John Forbes, Ed.D.	Units: 3	

# **Course Description**

**Phone number:** 559-940-2197

Email: johnforbes@me.com

This course is for administrators who desire to use technology to help 1) better manage their schools, 2) to make informed decisions regarding the use of technology to support student learning, 3) to assist teachers in the use of instructional technology to meet their student learning expectations, and 4) accept their role as change agents. The course topics include the use of applications to better manage data needs and a look at issues related to the use of technology in schools. Participants should gain a greater understanding of how technology can be used to increase achievement, improve student and parent involvement, manage campus' more effectively and efficiently, and develop a vision for the future of education. This class is appropriate for all levels of administration, both site and district.

Instructional technology touches on two sets of standards; those technology standards that are part of the ISTE National Technology Standards, which identify standards related to the use of technology, and all other subject area standards where technology is included. This course touches on both, basic technology skills and on how technology can be used in the instructional program to increase achievement toward all subject area standards.

#### **Course Dates:**

Self-paced; students may enroll at any time and take up to one year to complete assignments.

You have up to one year from the date of registration, and no less than three weeks (one week per credit), to complete the course.

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#### K-12 Curriculum Need

Education, as we know it today, is an institution that was created for a world that no longer exists. Our Industrial Age schooling model is beginning to break down as we enter the 21st Century and the Information Age. This new vision for schools requires a new type of school, new teaching methods, new learning alternatives, and most importantly, a new way of thinking. Who will be there to lead this change? This course is about that change, of looking at new ways of doing things, of breaking out of our status quo practices and collectively finding a better way, one that results in better managed schools, improved achievement, and happier constituents.

Not only does this course meet all of the ISTE National Technology Standards, it impacts all aspects of school management and leadership. Site and district administration are expected to be curriculum leaders, able to direct resources and programs in such a way that increases learning. Technology will play an ever increasing role in the transformation of education and administrators must be on the cutting edge of that change, must guide and focus that change, and be ready to lead the schools in a new age.

#### Research Based, Theory Driven

This course is based on the research and writings of a number of futuristic thinkers including: Alvin Toffler (Future Shock, The Third Wave, Power Shifts) John Naisbatt (Mega Trends and Megatrends 2000), and Dr. Howard Mehlinger (School Reform in the Information Age). This course brings into play long standing learning theory regarding feedback, learner centered activities, learner controlled learning, mastery learning, constructivism, and authentic assessment.

#### Relevant, applicable, and practical

Relevant—We live in a different age and our schools are failing because we have not figured it out. This course is to help change the course of education.

Applicable—School administration needs help. They are drowning in work, overloaded with new issues to deal with, and must learn to use technology to help them survive.

Practical—This course deals with situations and applications that every administrator must address including budget preparation, communication with stakeholders, positive school image, increased test scores, and more.

#### **Scholarship**

The foundation of this course is based on a book my Dr. Howard Mehlinger, Director of the Indiana University Center for Excellence in Education. This book, School Reform in the Information Age, is a definitive work on the difficulties taking place in our schools today and how technology can be used to positively impact learning and management.

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There is a lot of thinking required of each participant, the intent of which is to change people's way of thinking and as a result, their behavior. We talk about data-driven decision-making but this requires skill and knowledge on the part of the decision maker, whether it be a teacher or administrator. You cannot talk about school reform, data, student centered learning, mastery learning, or any other current or reform movement, without the involvement of technology. It is the foundation upon which all school reform will rest and we need leaders that are ready to build this new school system.

#### **National Technology Standards**

The national technology standards, established by ISTE, contain six overarching standards with details attached to each.

- 1. Technology and Operations Concepts. This area deals with knowledge, skills and concepts related to technology. Administration must stay abreast of current and emerging technologies and be ready to demonstrate their use in the classroom setting. That requires a basic level of technology competency.
- 2. Planning and Designing Learning Environments and Experiences. School administration is expected to be leaders and this includes curriculum and learning. All administrators need understanding in the development of computer-based instruction and how to establish networks, configure labs, and make technology available in ways that will increase achievement.
- 3. Teaching, Learning, and the Curriculum. Again, administrators are curriculum leaders and need to have a firm grasp of how technology addresses basic educational or learning principles.
- 4. Assessment and Evaluation. As leaders, administrators must be ready to show the way in terms of how technology can enhance authentic assessment and foster communication between teacher, student and parents.
- 5. Productivity and Professional Practice. This is the single most important aspect of this course. With so much to do, administrators need tools in their arsenal that will allow them to complete tasks efficiently and effectively.
- 6. Social, Ethical, Legal, and Human Issues. As we move into the 21st Century, there are many aspects of technology and values that need attention in our schools. Dealing with the legal and ethical issues surrounding the Internetalone is enough to keep administrators busy.

#### **Primary Learning Objectives**

Participants will:

1. gain computer and application competency necessary to effectively and efficiently administer a modern school.

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- 2. gain knowledge necessary to make informed decisions regarding the deployment of technology in a school for instructional purposes.
- 3. gain a more global perspective of the changes taking place in our world today necessary to better manage and guide the change process.
- 4. demonstrate awareness and establish a position regarding the major issues presented by the use of technology in education.
- 5. demonstrate an increase knowledge of how technology can be used to increase student achievement and to better manage assessment information for data-driven instructional decision-making.
- 6. demonstrate increased knowledge of how technology can be used to address the needs of a diverse student population.
- 7. gain competency in information literacy skills including the collection, analysis, synthesis, application, and communication of instructional data.
- 8. develop new communication skills that are part of a modern school.

#### **Course Materials**

Technology and School Administration by Dennis Funk is used as the course textbook. It contains all the core learning material, readings, and activities.

Assignment Booklet – This booklet contains all the assignments that must be completed for this course.

Learning CD which contains all the support files necessary to complete this course. Additional resources are included on the CD including sounds, movies, pictures, and other valuable educational resources.

http://www.dlfunk.com - This website will be used to support this class with links, shared commentary by students, and other resources necessary to complete the course.

#### **Course Requirements**

Carefully Read the Instructional Manual and complete the assignments in sequence.

Assignments: These activities in this course include manipulation of files supplied with the course materials, the creation of new documents, and Journal entries in response to posed questions and required reading.

Readings – reflection on pertinent readings that require thought and developing a position.

Main Project related to school administration—which might include budgets, parent communications, staff evaluation forms, databases, web site development, student information system evaluation, etc.

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All course requirements will result in electronic files or folders that may be submitted on floppy disk, Zip disk, burned onto a CD, or attached to an email to the instructor.

# Students must return the following files for evaluation:

# **Assignment Group & File**

- 6: My File
- 8 9: Folders folder
- 10 11: FILE10.doc
- 13 14: FILE13.doc
- 18 19, 21 24, 34: FILE18.doc
- 20: FILE20.doc
- 25 28: FILE25.doc
- 29: FILE29.doc
- 30: FILE30.doc
- 31: FILE31.doc
- 32: FILE32.doc
- 33: FILE33.doc
- 37 48: FILE37.doc
- 49: FILE49.doc
- 51 62: FILE51.xls

67 - 79: FIL67.ppt JOURNAL.doc Project File or Folder

## **WebPages Folder which contains:**

96 - 101: Text.htm

102 -103: Images.htm

104 -107: Tables.htm

108 – 110, 113: Links.htm

111 – 113: Anchors.htm

A self-addressed, stamped envelope is included with the course for the return of all evaluation materials. Support for the course is available by phone, fax, or email.

# **Grading**

Assignments – 35% Project - 30%

Journal - 35%

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## **Total Scores determine the final grade:**

A 90% - 100% B or Credit 75% - 89% No Credit 74% or below

In order to earn a letter grade of A, 40% of the grade will be based on the completion of the Journal in that it is a testament to the effort put into the class and is a measure of increased learning on the part of the student. The other items will be reduced to reflect 60% of the grade.

#### **Course Outline**

#### T. Forward

Reading – Vision and Mission (Howard Mehlinger)

- a. Introduction
- b. Course Organization

## **II. Basic Computer Operations**

- a. Operating System
  - i. Windows
  - ii. Macintosh
  - iii. The Debate
- b. Storage Formats **Major Applications**

#### **III. Word Processing**

- a. Basics
- b. Spell Check
- c. Thesaurus
- d. Readability Level Testing
- e. Graphics
- f. Charts
- g. Tables
- h. Mail Merge
- i. Instructional Features
- j. Issues Related to Word Processing
- k. Administrative Features

#### IV. Graphics

- a. Basic Concepts
- b. Formats
- c. File Types
- d. Applications Available

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- e. Acquiring ClipArt
- f. Copyright Issues
- g. Creating Projects
- h. Instructional Features
- i. Administrative Features

## V. Spreadsheet

- a. Basic Operation
- b. Formulas
- c. Additional Features
- d. Instructional Features
- e. Administrative Features

Reading – School Reform – Again? Finally? (Mehlinger)

#### VI. Database

- a. Basic Concept
- b. Operation
- c. Administrative Features
- d. Instructional Features

# VII. Presentation Software

- a. Basics Operation
- b. Administrative Features
- c. Instructional Features

# VIII. Desktop Publishing

- a. Basic Operation
- b. Administrative Features

#### IX. The Power of Media

- a. Sound
  - i. Basic Concept
  - ii. Operation
  - iii. Acquiring Sounds
  - iv. Instructional Features
  - v. Administrative Features
- b. Video
  - i. Basic Concept
  - ii. Acquiring Videos

## X. Internet

a. Basic Concept

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- b. Basic Operation
- c. Administrative Features
- d. Instructional Features
- e. Major Issues

Reading - Potentials for Technology in the Pursuit of Knowledge (Copeland)

## **XI.** Creating Web Pages

- a. What is HTML?
- b. Planning your web page
- c. Web Page software
- d. Inserting images
- e. Creating Tables
- f. Inserting Links
- g. Inserting Anchors
- h. Inserting Horizontal Bars
- i. Web Page Backgrounds

## XII. Networking a School

- a. Basic Concept
- b. Basic Operation
- c. Administrative Features
- d. Instructional Features
- e. Issues Regarding Networks

Reading – Teaching and Learning in the Information Age (Mehlinger)

# XIII. Major Areas of Educational Technology Development

- a. Student Information Systems
- b. Personal Data Assistants (PDA
- c. Wireless Networks
- d. Electronic Gradebooks
- e. Integrated Learning Systems
- f. Online Testing
- g. DVDs
- h. Video Delivery System
- i. PDA's and More
- i. Digital Cameras
- k. Digital Cam Corders
- 1. Video Editing Software
- m. Sensing Equipment
- n. What is CSIS?
- o. What is SIF?

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## XIV. Issues Regarding Technology and School Administration

- a. Staff Development
  - i. Technology Skills
  - ii. Curriculum Integration
  - iii.Options to Consider
- b. Technology Planning
- c. Equal Access
- d. Student Technology Skills
- e. Technology Funding

## **Assignments**

The assignments are grouped into activities, based on the topics of the course. While most of the activities are smaller steps of a larger assignment, some activities include responses to reading as well as a thoughtful consideration of how our schools can be made more effective through the use of technology.

The assignments contained in this course are closely aligned to the ISTE National Content Standards established for technology known as the National Educational Technology Standards (NETS) and Performance Indicators. Each assignment identifies the standards being addressed. Journal entries give the participants opportunities to make the connections with Achievement Standards in other subject areas and are identified as such.

You will find a list of these standards at the end of this document.

Whenever a computer function is determined to have a potential impact in other subject areas, particularly with multimedia options, participants will be encouraged to make the connection with national achievement standards in other subject areas.

#### Assignment Group & Technology Standards Addressed

- 1. Introduction to Course 1A,1B,2B,3A,5A,5B
  - a. Current status
  - b. Being a change agent

#### 2. Basic Computer Operation

- a. Organization and storage
- b. Instructional Features
  - i. Character Map
  - ii. Sound
- 3. Word Processing 1A, 2A, 2B, 2C, 2E, 3A, 3B, 3C, 3D, 4A, 4B, 5C, 6B, 6C, 6D, 6E
  - a. Formatting Text
  - b. Tabs and Margins

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- c. Cut and Paste, Drag and Drop
- d. Instructional and Administrative Application
  - i. Spell Check
  - ii. Thesaurus
  - iii. Readability Analysis
  - iv. Mail Merge
  - v. Graphics
  - vi. Comments
  - vii. HyperLinks

## 4. Graphics 1A,1B, 5C, 5D

- a. DRAW and PAINT Tools
- b. Pictures
- c. Internet
- d. Instructional and Administrative Application

## 5. Spreadsheet 1A, 1B, 5B, 5C, 5D

- a. Formatting Cells
- b. Calculations and Formulas
- c. Linking
- d. HyperLinks
- e. Sorting
- f. Graphing Data
- g. Instructional and Administrative Application

## 6. Database 1A,5C

- a. Overview
- b. Instructional and Administrative Application

## 7. Presentation Software 1A, 2A, 2B, 2C, 2D, 2E, 3A, 3B, 3C,

- a. Overview3D,4A,4B,4C,5D,6B,6E
- b. Special Effects
- c. Views
- d. Using Images
- e. Charts
- f. OrgCharts
- g. Instructional and Administrative Application

## 8. Publishing 1A, 5C, 5D

- a. Overview
- b. Instructional and Administrative Application

## 9. Media 1A, 2A, 2B, 2C, 3A, 3C, 3D, 4A

a. Overview 4B, 4C, 5C, 5D

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## b. Instructional and Administrative Application

## 10. Internet 1A, 1B, 2A, 2B, 2C, 2D, 2E, 3A, 3B, 3C,

- a. Overview 3D, 4A, 4B, 4C, 5C, 6B, 6E
- b. Information Literacy
- c. Issues
  - i. Security
  - ii. Filtering
  - iii. Acceptable Use
  - iv. Parent Permission
  - v. Plagiarism
  - vi. Dealing with Viruses
- d. Instructional and Administrative Application

## 11. Creating Web Pages 1A, 5C, 5D

- a. Overview
- b. Formatting
- c. Features
- d. Links
- e. Instructional and Administrative Application

## 12. Networking 1A, 1B, 2A, 2B, 2C, 2D, 2E, 3A, 3D,

- a. Overview 5B, 5C, 5D, 6D
- b. Security
- c. Software Licensing
- d. Instructional and Administrative Application

## 13. Technology Development 1A,1B,2A,2B,2C,2D,2E,3A,3B,3C,

- a. Student Information Systems 3D, 4A, 4B, 4C, 5C, 6B, 6E
- b. PDAs
- c. Wireless
- d. Other Developments
- e. Instructional and Administrative Application

# 14. Issues in Technology 1A, 1B, 2B, 2C, 2D, 2E, 3A, 3B, 3C,

- a. Staff Development 3D, 5A, 5B, 5C, 5D
- b. Technology Planning
- c. Equity of Access
- d. Student Technology Skills
- e. Technology Funding

## 15. Project

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## **National Educational Technology Standards**

The assignments contained in this course are closely aligned to the ISTE National Content Standards established for technology known as the National Educational Technology Standards (NETS) and Performance Indicators.

The following technology standards are addressed throughout this course.

## 1. Technology and Operations Concepts

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology
- B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

## 2. Planning and Designing Learning Environments and Experiences

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- A. designdevelopmentally appropriate learning opportunities that apply technology-enhanced instruction strategies to support the diverse needs of learners.
- B. apply current research on teaching and learning with technology when planning learning environments and experiences
- $C. \ identify and locate technology resources and evaluate them for accuracy and suitability.\\$
- D. plan for the management of technology resources within the context of learning activities
- E. planstrategies to manage student learning in a technology-oriented environment.

#### 3. Teaching, Learning, and the Curriculum

Teachers implement curriculum plans, that include methods and strategies for applying technology to maximize student learning.

Teachers:

- A. facilitate technology-enhanced experiences that address content standards and student technology standards.
- B. use technology to support learner-centered strategies that address the diverse needs of students.
- C. applytechnology to develop students' higher order skills and creativity.
- D. manage student learning activities in a technology-enhanced environment.

#### 4. Assessment and Evaluation

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

A. apply technology in assessing student learning of subject matter using a variety of assessment techniques.

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- B. use technology resources to collect and analyzed ata, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- C. apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

## 5. Productivity and Professional Practice

Teachers use technology to enhance their productivity and professional practice. Teachers:

- A. usetechnologyresourcestoengageinongoingprofessionaldevelopmentandlifelonglearning
- B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology to support student learning.
- C. applytechnologytoincrease productivity.
- D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

## 6. Social, Ethical, Legal, and Human Issues

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice.

Teachers:

- A. model and teach legal and ethical practice related to technology use.
- B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- C. identify and use technology resources that affirm diversity.
- D. promote safe and healthy use of technology resources.
- E. facilitate equitable access to technology resources for all students.

#### **Final Course Grade and Transcripts**

When all work for the course has been completed, students will need to logon to the Center for Professional Development website (<a href="http://ce.fresno.edu/cpd">http://ce.fresno.edu/cpd</a>) to "Submit Grade Form". Once the instructor fills out the grade form online, students may log back in to request their Grade Report as well as order transcripts online. Please allow at least two weeks for the final grade to be posted. For more information see the Independent Studies Policies and Procedures that were sent to you when you received your course materials, or in your online course. They are available, also at <a href="http://ce.fresno.edu/cpd">http://ce.fresno.edu/cpd</a> - under General Information > CPD Policies.

# **Plagiarism and Academic Honesty**

All people participating in the educational process at Fresno Pacific University are expected to pursue honesty and integrity in all aspects of their academic work. Academic dishonesty, including plagiarism, will be handled according to the procedures set forth in the Fresno Pacific University Catalogue. URL <a href="http://www.fresno.edu">http://www.fresno.edu</a>.

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#### CONTINUING EDUCATION PROGRAM STUDENT LEARNING OUTCOMES:

- CE 1. Demonstrate proficient written communication by articulating a clear focus, synthesizing arguments, and utilizing standard formats in order to inform and persuade others, and present information applicable to targeted use.
- CE 2. Demonstrate comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.
- CE 3. Reflect on their personal and professional growth and provide evidence of how such reflection is utilized to manage personal and professional improvement.
- CE 4. Apply critical thinking competencies by generating probing questions, recognizing underlying assumptions, interpreting and evaluating relevant information, and applying their understandings to the professional setting.
- CE 5. Reflect on values that inspire high standards of professional and ethical behavior as they pursue excellence in applying new learning to their chosen field.
- CE 6. Identify information needed in order to fully understand a topic or task, organize that information, identify the best sources of information for a given enquiry, locate and critically evaluate sources, and accurately and effectively share that information.

#### FRESNO PACIFIC UNIVERSITY STUDENT LEARNING OUTCOMES

**Student Learning Outcomes Oral Communication:** Students will *exhibit* clear, engaging, and confident oral communication – in both individual and group settings – and will critically *evaluate* content and delivery components.

**Written Communication:** Students will *demonstrate* proficient written communication by *articulating* a clear focus, *synthesizing* arguments, and utilizing standard formats in order to *inform* and *persuade* others.

**Content Knowledge:** Students will *demonstrate* comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.

**Reflection**: Students will *reflect* on their personal and professional growth and *provide evidence* of how such reflection is utilized to manage personal and vocational improvement.

**Critical Thinking:** Students will *apply* critical thinking competencies by *generating* probing questions, *recognizing* underlying assumptions, *interpreting* and *evaluating* relevant information, and *applying* their understandings to new situations.

**Moral Reasoning:** Students will *identify* and *apply* moral reasoning and ethical decision-making skills, and *articulate* the norms and principles underlying a Christian world-view.

**Service**: Students will *demonstrate* service and reconciliation as a way of leadership.

**Cultural and Global Perspective:** Students will *identify* personal, cultural, and global perspectives and will employ these perspectives to *evaluate* complex systems.

**Quantitative Reasoning**: Students will accurately *compute* calculations and symbolic operations and *explain* their use in a field of study.

**Information Literacy:** Students will *identify* information needed in order to fully understand a topic or task, *explain* how that information is organized, *identify* the best sources of information

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