SED 383, DESIGNING INSTRUCTION THROUGH TECHNOLOGY INTEGRATION  
SPRING, 2008  

SED 383 is a required course for Secondary Certification  
College of Education  
Department of Curriculum and Instruction

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**Office Hours:**  
Tuesdays and Thursdays  
7:30 a.m. – 9:20 a.m.  
Other times may be arranged

**Course Description:**  
This course is designed to provide teachers who seek certification at the secondary level with an introductory overview of the teacher education program, with an introduction into instructional issues and teaching models, and with an introduction into how technology impacts education both in terms of increasing teacher productivity and in terms of integrating technology into instruction.

**Lectures and Related PPR Competency, ISTE NETS:**
- Syllabus and Assignment #2 003(1)  
- Public Education in America—2007-2008 009(7)  
- Profile of Education in Texas 009(7), 013(5)  
- Teacher Certification at SHSU (including PPR samples) 013(5)  
- Teacher Work Sample  
- AEIS (Academic Excellence Indicator System)  
- PDAS 003(1)(2)(3)(4)(6)  
- Effective Instructional Technology Projects 003(6); 009(6); V(B); VI(D)  
- School Finance/Teacher Salaries 013(5)  
- Copyright/Website Evaluation 009(2); II (C); VI (A)

**Assignments**

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<tr>
<th>Objectives /Learning Outcomes</th>
<th>Activities</th>
<th>Form of Submission for Grade/Assessment</th>
<th>ISTE Standards***</th>
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</table>
| Assignmen#1 To create a school academic calendar while a list of course topics and subtopics. | **Introduction Strategy:** Download a copy of the TEKS for a particular course that you might teach. www.tea.state.tx.us/teks Print out the TEKS.  
**Assignment:** Create a coded, colored year long academic calendar and a list of topics and sub-topics for a course you plan to teach. First you should develop a list of major topics (units) you plan to teach for the entire year (Look at the TEKS for ideas). Then, create a topic lists with three columns including topics, length of time for the topic (unit), and the TEKS to be covered (codes may be used). Next, create a calendar reflecting when the topics (units) will | **Hand in:**  
1. Color, coded year long calendar in a course you teach.  
2. List of unit topics, | I(A), V(C) | 009(3) 009(5) 009(1) |
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<td>be taught. You may wish to do this using Microsoft Word or other calendar programs. The calendar should cover from August through May. (Teacher contracts include 187 days with 180 days of instruction.) You may wish to look at school calendars on school websites for ideas. Begin by choosing a starting day for school and divide the calendar into six weeks grading periods. In 2007-2008 schools may not begin before the fourth week in August. &lt;There may be exceptions&gt;. Place holidays, Spring break, before school in-service days, teacher workdays, and bad weather days on the calendar. Then add your color coded topics (units) onto the calendar.</td>
<td>length of time for the unit, and the TEKS to be covered.</td>
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Assignmen Assignment #2—To create and present a lesson in your teaching field. Assignment: Plan an instructional lesson in your teaching field or at your grade level. The lesson should contain the following components.

**Establishing the Lesson Framework**

I. Lesson Goal

- Example: Students will design an experiment showing how gravity and friction work on objects.
- Example: Students will correctly illustrate a given hour using both a blank clock face and a toy clock model.
- Example: Students will construct graphs of simple linear equations, and figures on the coordinate plane.
- Example: Students will present why the political, social, and technological advances have industrialized the way of life in the United States.
- Example: Students will identify the major parts of a shark, whale, fish, and octopus.

II. Objective:

III. Rationale:

IV. TEKS/Student Learner Expectations:

**Designing Supportive Lesson Environment**

III. Materials (Any materials used in the lesson)

IV. Setting

How will you set up your classroom for the lesson? Will the setup remain the same throughout the lesson? How are you going to group your students? How are you going to manage your materials? What safety issues need to be addressed during the lesson? What prior knowledge do your students have or need for the lesson? How will you individualize for students who need individual help?

V. Student Needs

Hand in:

1. Lesson description containing the nine items required on the lesson—handed in when lesson is presented (20 points)
2. In addition the lesson plan script should be turned in when the lesson is presented (20 points)
3. Participation in student appraisals or on a camera team (20 points)

Camera Team:

<p>| II,A,B | 003(4) | 003(6) | 003(8) | 009(3) | 009(1) |</p>
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<tr>
<td></td>
<td><strong>Instructional Strategies</strong></td>
<td>All students will be on a camera team during the week prior to teaching</td>
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<td></td>
<td>V Introduction/Focus (How will you introduce your lesson? How will you get your students’ attention? What is your “hook”??)</td>
<td>1. Still camera (The person operating the still camera should place the pictures on the student’s flash drive, not on the S drive.)</td>
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<td>VI. Instructional Procedures (What type of instructional strategy will you apply during the lesson? Explain, review, guided practice, exploration, facilitation questions, application, etc. How will you differentiate instruction?)</td>
<td>2. Video camera 3. 30 minute timer and bell ringer</td>
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<td>VII. If technology will be used by you or by the students during the lesson, explain how will it be used. Also, describe what your alternative disaster plan will be for you and/or for your students if the technology fails to work as you expected.</td>
<td>Assessment-Rubric provided provided</td>
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<td>VIII. Closure (How will you conclude your lesson and be sure that the lesson ends logically?)</td>
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<td><strong>Evaluation Strategies</strong></td>
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<td>IX. Assessment/Evaluation Descriptions of Types of Assessment Formative/Summative</td>
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**Assignmen t #2 (Continued )**

**PowerPoint Recommendations for Classroom Teaching Presentations:**

1. Use short phrases of no more than six or seven words per line.
2. Have a space between each line of text.
3. Use bullets to control when each phrase is seen by the students. This means controlling when a phrase enters a slide using slide animation.
4. Use few colors for fonts and backgrounds and make the colors used relate to meaning.
5. Use simple, large, system fonts. Do not use all caps.
6. Do not use transitions between slides.
7. Use simple, meaningful graphics if appropriate.
8. Use sound cautiously and only if the sound has meaning.
9. Check for spelling and grammar errors.
10. Presentation Recommendation: When PowerPoint is in the presentation mode, the user may select Control P and write or draw over the top of the presentation to make certain points. The user may discard the writing when leaving the presentation mode. The shape and color of the point may be changed by clicking the right button when in the
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<tr>
<td>presentation mode. 11. Practice your presentation. 12. If you choose to use a PowerPoint in a presentation for Assignment #2, bring the PowerPoint on the day you teach to class on a flashdrive. This will provide you a backup for accessing your PowerPoint in case there are problems with the network and you can’t access your S drive.</td>
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<td>Assignment #3 To create a linear PowerPoint presentation introducing yourself to the school community.</td>
<td>Introduction Strategy: A model of looping, linear PowerPoint presentation is available to students in Blackboard. <strong>Assignment:</strong> Create a linear PowerPoint classroom presentation (ten slide minimum) that would be appropriate in introducing yourself to a school community (parents, PTO, or booster club.) Include a graphic organizer providing a description of the presentation. Save the file as a traditional looping PowerPoint presentation. <strong>Computer Lab practice</strong></td>
<td>Hand in: 1. Printed presentation as handout with six slides on each sheet 2. The graphic organizer (storyboard)</td>
<td>I(A), V(C)</td>
<td>009(3), 009(5), 009(1)</td>
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<td>Assignment #4—To create a non-linear PowerPoint presentation sharing curriculum information in your content area.</td>
<td>Introduction Strategy: Two non-linear PowerPoint curriculum-oriented-models representing different developmental levels is available to students in Blackboard <strong>Assignment:</strong> Create a non-linear PowerPoint classroom presentation (twelve slide minimum) that would be appropriate in your curriculum area or grade level. <strong>Computer Lab practice</strong></td>
<td>Hand in: 1. Printed presentation as handout with six slides on each sheet 2. The graphic organizer (storyboard)</td>
<td>III (C,D); V(C)</td>
<td>009(1), 009(4)</td>
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<td>Assignment #5—Test—either a mid-term or a final</td>
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<td>Assignment #6 To Create a website with goals, with background and with</td>
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<td>Hand in:</td>
<td>IV(A)</td>
<td>009(6)</td>
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<td>create a website with goals, background and teaching pictures</td>
<td>at least ten pictures of you teaching your lesson in Assignment #2. The pictures should first be placed into Microsoft Picture Manager and reduced in digital size and then placed in a folder on your website. Then the pictures may be placed into a PowerPoint presentation and saved as a website. Comments should be placed as text between picture slides indicating such things as &quot;This is my lecture&quot; or &quot;The following pictures contain pictures of students working in groups&quot;. There should be no spelling or grammar errors on the website. Required watching for help with your website: <a href="http://tegrity.shsu.edu/tegrity">http://tegrity.shsu.edu/tegrity</a>, click on teginstructor, the Ezell 383 folder, then watch each of the following videos: &lt;br&gt; &lt;br&gt; Creating a webpage for SED 383  &lt;br&gt; Creating Goals and Background Pages on Your Website  &lt;br&gt; Changing the Color of Hyperlinks and Followed Hyperlinks  &lt;br&gt; In addition go to my personal website, <a href="http://www.shsu.edu/~edu_bre">www.shsu.edu/~edu_bre</a>, select 383—Model Webpage and take a look at the model that you may emulate for your website.</td>
<td>First page (index), Background and Goals pages due—&lt;br&gt; May 1  &lt;br&gt; PowerPoint with teaching pictures due</td>
<td>Rubric provided</td>
<td>***PPR competencies and ISTE Nets Standards are listed at the end of the syllabus</td>
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**Assignments and Points**

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<tr>
<th>Assignment</th>
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<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Assignment #1</td>
<td>Long Term Curriculum Planning Document</td>
<td>100</td>
</tr>
<tr>
<td>Assignment #2</td>
<td>Teaching—140 pts. Lesson—20 pts. Script—20 pts. Student appraisals/Camera team—20 pts</td>
<td>200</td>
</tr>
<tr>
<td>Assignment #3</td>
<td>Linear PowerPoint</td>
<td>50</td>
</tr>
<tr>
<td>Assignment #4</td>
<td>Non-linear PowerPoint</td>
<td>100</td>
</tr>
<tr>
<td>Assignment #5</td>
<td>Test</td>
<td>100</td>
</tr>
<tr>
<td>Assignment #6</td>
<td>Website</td>
<td>150</td>
</tr>
<tr>
<td>Observation Hours—10—</td>
<td>Field Experience Information: <a href="http://www.shsu.edu/~edu_ofe/fieldexp.html">http://www.shsu.edu/~edu_ofe/fieldexp.html</a></td>
<td>200</td>
</tr>
<tr>
<td>Potential for Professional Growth— downloads and materials in class (50), Computer Lab work— Assignment practice, Video Broadcast (50),</td>
<td>100</td>
<td></td>
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<tr>
<td>Total Points</td>
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<td>1000</td>
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**Attendance** (1 letter grade will be deducted for each absence over the three hours allowed by SHSU)

All grades will be displayed on Blackboard.

Points to determine grade for the semester:

1000-950—A  
949-900—B  
899-850—C  
849-800—D  
Below 800—F

Class Rules:  
Teacher education courses exist in order to prepare you as a teacher. The rules in SED 383 are similar to the kinds of expectations you would experience in a teaching job. You should begin to see yourself not as a student but as an adult who is preparing for a job working with students.

1. You need to be in class everyday. Roll will be called at the beginning of every class. If you come in late after I have checked roll, it is up to you to see me that period and ask me to change your attendance record from absence to tardy. If you wait until the next class to ask me to make the change, I will not do so.
2. No work is accepted late.
3. If you are ill on the day an assignment is due and you decide not to attend class, you must e-mail the completed assignment by the time your class begins or have the assignment brought in by another student.
4. You must prepare, in advance, for problems involving technology. Don’t wait until the last minute to complete and print assignments. Excuses such as, “My printer won’t work”, “My ink cartridge was dry” are not acceptable. There are many computers and printers available to students on campus.
5. If you arrive in class on the day that an assignment is due, I will not allow you to go to the lab and finish your assignment. (This includes printing.) On the day an assignment is due, you should walk through the classroom door with the assignment in your hand.
6. Students are not excused from class to do observations.

Expectations:

Computer Access Needed: You will frequently need a computer, a printer, and Internet access for this class. If you don’t have a personal computer, you need to familiarize yourself with the campus
sites that allow computer use by students such as the library and AB-1.

**Blackboard Skills Needed:** Familiarity with Blackboard including group e-mail and attachments

**Supplies Needed for Class:**
Flash drive

**Naming and Saving Conventions**
All assignments should be saved using your last name, the first letter of your first name followed by the words Assignment # (whatever) for example: Smith, J.—Assignment #6. All assignments submitted in Assignments must follow this format.

**Attendance policy**—You are preparing yourself in teacher education courses for a job requiring you to be at work and on time every day. You need to be in this class, every day and on time. Students who miss in excess of three class periods will be reported to the disposition committee for evaluation of their commitment to teaching.

**Cell phones and pagers are to be turned off during class.**

**Disability Statement:**
It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, school/department chair, or by contacting the Chair of the Committee for Continuing Assistance for Disabled Students and Director of the Counseling Center, Lee Drain Annex, or by calling (936) 294-1720.

**Student Absences on Religious Holidays Policy:**
Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.
Important Websites:
1. State Standards for Texes tests: This site contains those standards that you will be responsible for on both the content area exit and the Pedagogy and Professional Responsibilities (PPR). Click on Standards and Testing and then on Educator Standards
   http://sbec.state.tx.us
2. TEKS This site contains the TEKS for all disciplines taught in Texas school
   http://www.tea.state.tx.us
3. Academic Excellence Indicator System (AEIS) –Campus and district information about all Texas schools
   http://www.tea.state.tx.us
   Click on Most Popular Information and (Year) AEIS Reports
Competency 003
The teacher understands procedures for designing effective and coherent instruction and assessment based on appropriate learning goals and objectives.

The beginning teacher:
1. Understands the significance of the Texas Essential Knowledge and Skills (TEKS) and of prerequisite knowledge and skills in determining instructional goals and objectives.
2. Uses appropriate criteria to evaluate the appropriateness of learning goals and objectives (e.g., clarity; relevance; significance; age-appropriateness; ability to be assessed; responsiveness to students’ current skills and knowledge, background, needs, and interests; alignment with campus and district goals).
3. Uses assessment to analyze students’ strengths and needs, evaluate teacher effectiveness, and guide instructional planning for individuals and groups.
4. Understands the connection between various components of the Texas statewide assessment program, the TEKS, and instruction, and analyzes data from state and other assessments using common statistical measures to help identify students’ strengths and needs.
5. Demonstrates knowledge of various types of materials and resources (including technological resources and resources outside the school) that may be used to enhance student learning and engagement, and evaluates the appropriateness of specific materials and resources for use in particular situations, to address specific purposes, and to meet varied student needs.
6. Plans lessons and structures units so that activities progress in a logical sequence and support stated instructional goals.
7. Plans learning experiences that provide students with opportunities to explore content from integrated and varied perspectives (e.g., by providing intradisciplinary and interdisciplinary instruction, encouraging students’ application of knowledge and skills to the world beyond the school, designing instruction that reflects students’ increasing ability to examine complex issues and ideas).
8. Allocates time appropriately within lessons and units, including providing adequate opportunities for students to engage in reflection, self-assessment, and closure.

Competency 009
The teacher incorporates the effective use of technology to plan, organize, deliver, and evaluate instruction for all students.

The beginning teacher:
1. Demonstrates knowledge of basic terms and concepts of current technology (e.g., hardware, software applications and functions, input/output devices, networks).
2. Understands issues related to the appropriate use of technology in society and follows guidelines for the legal and ethical use of technology and digital information (e.g., privacy guidelines, copyright laws, acceptable use policies).
3. Applies procedures for acquiring, analyzing, and evaluating electronic information (e.g., locating information on networks, accessing and manipulating information from secondary storage and remote devices, using online help documentation, evaluating electronic information for accuracy and validity).
4. Knows how to use task-appropriate tools and procedures to synthesize knowledge, create and modify solutions, and evaluate results to support the work of individuals and groups in problem-solving situations and project-based learning activities (e.g., planning, creating, and editing word processing documents, spreadsheet documents, and databases; using graphic tools; participating in electronic communities as learner, initiator, and contributor; sharing information through online communication).
5. Knows how to use productivity tools to communicate information in various formats (e.g., slide show, multimedia presentation, and newsletter) and applies procedures for publishing information in various ways (e.g., printed copy, monitor display, Internet document, and video).
6. Knows how to incorporate the effective use of current technology; use technology applications in problem-solving and decision-making situations; implement activities that emphasize collaboration and teamwork; and use developmentally appropriate instructional practices, activities, and materials to integrate the Technology Applications TEKS into the curriculum.
7. Knows how to evaluate students’ technologically produced products and projects using established criteria related to design, content delivery, audience, and relevance to assignment.
8. Identifies and addresses equity issues related to the use of technology.

Competency 011: The teacher understands the importance of family involvement in children’s education and knows how to interact and communicate effectively with families.
1. Develop a positive relationship with parents early.
2. Parent/teacher communication

Competency 013: The teacher understands and adheres to legal and ethical requirements for educators and is knowledgeable of the structure of education in Texas.
1. A national perspective
2. Structure of the state education system
ISTE NETS for Teachers

ISTE NETS for Teachers (NETS•T), which focus on preservice teacher education, define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. All candidates seeking certification or endorsements in teacher preparation should meet these educational technology standards. It is the responsibility of faculty across the university and at cooperating schools to provide opportunities for teacher candidates to meet these standards.

The six standards areas with performance indicators listed below are designed to be general enough to be customized to fit state, university, or district guidelines and yet specific enough to define the scope of the topic. Performance indicators for each standard provide specific outcomes to be measured when developing a set of assessment tools. The standards and the performance indicators also provide guidelines for teachers currently in the classroom.

I. TECHNOLOGY OPERATIONS AND CONCEPTS.
Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:
A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students)
B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.
Teachers plan and design effective learning environments and experiences supported by technology. Teachers:
A. design developmentally appropriate learning opportunities that apply technology-enhanced instructional 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. plan strategies to manage student learning in a technology-enhanced environment.

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

IV. 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.
B. use technology resources to collect and analyze data, 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.

V. PRODUCTIVITY AND PROFESSIONAL PRACTICE.
Teachers use technology to enhance their productivity and professional practice. Teachers:
A. use technology resources to engage in ongoing professional development and lifelong learning.
B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
C. apply technology to increase productivity.
D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

VI. 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.

**Bibliography:**


