

**MISSISSIPPI STATE UNIVERSITY COLLEGE OF EDUCATION**  
DEPARTMENT of INSTRUCTIONAL SYSTEMS and WORKFORCE DEVELOPMENT  
COURSE SYLLABUS

**Course Prefix and Number:** TECH 8843

**Course Title:** Foundations and Philosophy of Instructional System and Design

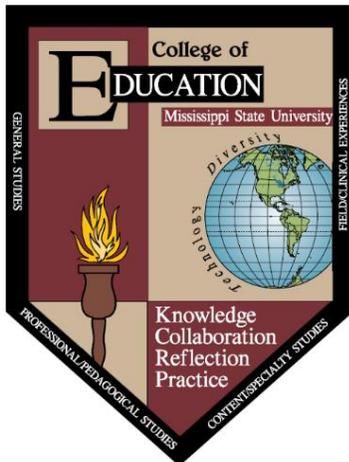
**Credit Hours:** 3 credit hours

**Method of Instruction:** *LECTURE = UCCC Code C*

**Catalogue Description**

Three hours lecture. An examination of the foundation and philosophical knowledge for instructional systems and design models including evaluation of instructional design processes.

**College of Education Conceptual Framework:**



The faculty in the College of Education at Mississippi State University are committed to assuring the success of students and graduates by providing superior learning opportunities that are continually improved as society, schools, and technology change. The organizing theme for the conceptual framework for the College of Education at Mississippi State University is educational professionals - dedicated to continual improvement of all students' educational experiences. The beliefs that guide program development are as follows:

1. **KNOWLEDGE** - Educational professionals must have a deep understanding of the organizing concepts, processes, and attitudes that comprise their chosen disciplinary knowledge base, the pedagogical knowledge base, and the pedagogical content knowledge base. They must also know how to complement these knowledge bases with the appropriate use of technology.
2. **COLLABORATION** - Educational professionals must continually seek opportunities to work together, learn from one another, forge partnerships, and assume positions of responsibility.
3. **REFLECTION** - Educational professionals must be willing to assess their own strengths and weaknesses through reflection. They must also possess the skills, behaviors, and attitudes necessary to learn, change, and grow as life-long learners.
4. **PRACTICE** - Educational professionals must have a rich repertoire of research-based strategies for instruction, assessment, and the use of technologies. They must be able to focus that array of skills on promoting authentic learning by all students or clients, while exhibiting an appreciation and commitment to the value and role of diversity.

## **Course Objectives:**

Upon completion of this course, students will be able to:

1. Demonstrate understanding of the foundation knowledge upon which instructional design is based. (CFPO #1, 2, 3, 8, 10, 11, 13, 14).
2. Analyze major learning theories in the field of instructional design. (CFPO #3, 5, 7, 8, 19, 11, 13).
3. Critically examine the taxonomy of instructional technology. (CFPO #1, 2, 3, 7, 10, 11, 13, 14).
4. Identify various types of instructional design models.
5. Asses the strength and the weaknesses in each instructional design model (CFPO #10, 13, 11).
6. Asses the strength and the weaknesses inherent in each instructional design model. (CFPO #3, 4, 8, 14).
7. Create instructional design project. (CFPO #1, 3, 4, 8, 10, 11, 13, 14).
8. Develop the skill to evaluate instructional design models. (CFPO) #1, 2, 3, 4, 7, 8, 10, 12,13).

## **Detailed Course Outline:**

- 1) Instructional Design and the Scope (5 hours)
  - a) Defining instructional design (1 hour)
  - b) Instructional technology (1 hour)
  - c) Curriculum design(1 hour)
  - d) Instructional system design (2 hours)
- 2) Philosophical and Psychological Foundations of Instructional Design (6 hours)
  - a) Behaviorist principles in instructional design (1 hour)
  - b) Cognitive principles in instructional design (1 hour)
  - c) Constructivist principle and instructional design (1 hour)
  - d) Context-based approach to instructional design (1 hour)
  - e) The role of Howard Gardner's multiple intelligence in instructional design (2 hours)
- 3) Learning Theories and Instructional Design (8 hours)
  - a) The purpose of instructional design theories (1 hour)
  - b) Instructivist theory (1 hour)
  - c) Goal oriented instructional design theory (1 hour)
  - d) Inquiry and problem-based instructional design theory (1 hour)
  - e) Connectivist theory (1 hour)
  - f) Andragogy (adult learning characteristics) (1 hour)
  - g) Heutagogical theory (1 hour)
  - h) Taxonomies of instructional design (1 hour)
- 4) Using Technologies to Support Instructional Design Practices (7 hours)
  - a) The use of technology to promote learning and instructional design (2 hours)
  - b) Encouraging reflective learning using various technologies (1 hour)

- c) Fostering communication through video, audio, digital artifacts, images, photos etc. (1 hour)
  - d) Promoting synchronous and asynchronous learning platforms in instructional design (1 hour)
  - e) Promoting adult learning network to enhance collaborate learning among student groups (1 hour)
  - f) Facilitating feedback between the instructor and the students and among students (1 hour)
- 5) Needs Assessment in Instructional Design (4 hours)
- a) The purpose of needs assessment (1 hour)
  - b) Steps in needs assessment (1 hour)
  - c) Setting priority (1 hour)
  - d) Making decision based on the data generated (1 hour)
- 6) The Nature of Instructional Systems and Models of Instructional Design (5 hours)
- a) ADDIE model (rapid prototyping) (1 hour)
  - b) STAR model (1 hour)
  - c) Gagne's 9 events of instruction (1 hour)
  - d) Dick and Carey model systematic instructional design (1 hour)
  - e) Merrill's first principles of instruction (1 hour)
- 7) Evaluation of Instructional Systems, Instructional Design and Training Workshop (10 hours)
- a) The role of feedback and formative assessment in instructional design (2 hours)
  - b) Reflection on the part of the trainer and the trainees (2 hours)
  - c) Assessment of the knowledge and skill acquired (with reference to the learning objectives) (1 hour)
  - d) Application of the knowledge and the skill acquired (1 hour)
  - e) Self-evaluation of the instruction/training by students (1 hour)
  - f) The bottom-line impact, cost of instruction and training (1 hour)
  - g) Formative evaluation (collecting data for improvement) (1 hour)
  - h) Summative evaluation (assessing the impact of the overall product) (1 hour)

**Text(s):**

Land, S. (ed.) and Smith, B. (2018). *Theoretical foundation of learning environment*. Routledge: New York

Seel, N. M., Lehmann, T., Blumschein, P. & Podolskiy, O. A. (2018). *Instruction design for learning: Theoretical foundations*. Sense Publishers: The Netherlands

**Description of Instruction:**

**Campus 1:** Face-to-Face Lecture: Instructional methods include interactive lecture, class discussion, brainstorming, demonstration, discovery learning through internet research, question and answer, small group activities, project-based learning etc.

**Campus 5:** Lecture. The course will be delivered through an on-line platform using Canvas. Methods of delivering instruction include interactive lecture, discussion, discovery learning using

web, question and answer through Canvas chat room discussion, small group activities, brainstorming, project-based learning, activities, telephone and e-mail consultation.

### **Honor Code:**

**(Campus 1 & 5)** The honor code states: "As a Mississippi State University student I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do." This is especially important in online courses. For example, cheating on quizzes and resubmitting files from other courses will not be tolerated.

Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the honor code, to accept responsibility for learning, and to follow the philosophy and rules of the honor code. Ignorance of the rules does not exclude any member of the MSU community from the requirements or consequences of the honor code. For additional information please visit <http://www.honorcode.msstate.edu>.

**(Campus 5 specifically)** At the beginning of the semester, students will read the Honor Code and agree to follow the Honor Code.

### **Technology:**

This course will be taught through the internet (online) using Canvas Learning Management System. Course syllabus, course materials and contents, lecture notes, assignments, tests and course information etc., will be posted on Canvas. The following tools will be used for instruction

- Telephone consultation
- E-mail consultation
- Chat room
- Discussion Board posting
- Individual and group consultation with the instructor via telephone

### **Diversity:**

Diversity will be addressed in this course by using a variety of instructional methods, by recognizing that students have different learning styles and learn at different pace. A variety of assignments including assessment and tests will be utilized in order to cater for individual differences among students.

### **Accommodations for Students with Disabilities:**

Students with disabilities in need of accommodations to meet the expectations of this course are encouraged to bring this need to the attention of the instructor and should register with the Office of Student Support Services as soon as possible. The Office of Student & Disability Support Services is located in 01 Montgomery Hall, (662) 325-3335, and <http://www.sss.msstate.edu/>.

**University Safety Statement:**

Mississippi State University values the safety of all campus community members. Students are encouraged to register for Maroon Alert texts and to download the Everbridge App. Visit the Personal Information section in Banner on your mystate portal to register. To report suspicious activity or to request a courtesy escort via Safe Walk, call University Police at 662-325-2121, or in case of emergency, call 911. For more information regarding safety and to view available training resources, including helpful videos, visit ready.msstate.edu.

**Field Component:**

This course does not include a field experience

**Evaluation of Student Progress: Campuses 1 & 5**

**Student Activities**

- Assignment 1: Students understand the foundation knowledge upon which various instructional design is based and provide examples on how the foundation knowledge is used to formulate instructional design practices (Objective 1).
- Assignment 2: Develop the ability to discuss various theories that guide instructional design and be able to critically review them for strengths and weaknesses (Objective 1, 2, 5, 6).
- Complete a mid-term exam: Students will understand the levels academic ability and how to use to use to design instruction from simple to complex (from knowing and understanding to evaluating knowledge and creating new ideas and developing new emerging pattern) (Objectives 1-6).
- Complete final exam: The final exam is used to assess students understanding of the course materials. (Objectives 1-6).
- Instructional Design Project: Students will design an instructional program using various models discussed in the course (Objective 7, 8).
- Discussion Boards. This is used to encourage interaction among the students and to share ideas and learn from each other (CFPO #1, 2, , 10, 11).

**Assessment of Student Performance:**

Assignment 1	100 points
Assignment 2	100 points
Mid-term Exam	100 points
Final Exam	150 points
Discussion Board	50 points
Instructional Design Project	200 points
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Total Point	700 points

### **Assignment**

Students will work in groups to complete the instructional design project. Two students will make up one group. Each group is required to provide a 10-page instructional design project.

### **Grading Scale:**

Grades	Points
A	630-700
B	560-629
C	490-559
D	420-489
F	0-419

### **Attendance Policy:**

**Campus 1 Attendance Policy:** Student participation in both chat room discussion and completion of discussion board will be used to determine attendance. Students are required to inform the instruction if they are not able to participate in chat room and discussion board activities. MSU policy requires students to adhere to AOP 12.09 (<http://www.policies.msstate.edu/policypdfs/1209.pdf>)

**Campus 5 Attendance Policy:** Student participation in both chat room discussion and completion of discussion board will be used to determine attendance. Students are required to inform the instructor if they are not able to participate in chat room and discussion board activities.

### **Course Policies:**

1. All communication should be carried out using CANVAS e-mail.
2. No personal e-mail will be used.
3. Deadlines will be observed
4. Five points will be deducted each day any assignment is submitted late up to a maximum of 5 days. Any assignment due past due is subject to 5 points deduction (5 points per day).
5. After 5 days, no assignment will be accepted.

### **Title IX Policy:**

MSU is committed to complying with Title IX, a federal policy that prohibits discrimination, including violence and harassment, based on sex. This means that MSU's educational programs and activities must be free from sex discrimination, sexual harassment, and other forms of sexual misconduct. If you or someone you know has experienced sex discrimination, sexual violence and/or harassment by any member of the University community, you are encouraged to report the conduct to MSU's Director of Title IX IEEO Programs at 325-8124 or by e-mail to [titleix@msstate.edu](mailto:titleix@msstate.edu). Additional

resources are available at <http://www.msstate.edu/web/security/title9-12.pdf>, or at <http://students.msstate.edu/sexualmisconduct/>.

### **Bibliography:**

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- Seel, N. M., Lehmann, T., Blumschein, P. & Podolskiy, O. A. (2018). *Instruction Design*