

Syllabus: CECS 6320
Creating Technology-based Learning Environments

University of North Texas

Spring 2016, Jan 19 – May 12, 2012

Online Course in Blackboard • Discovery Park 202 • 3 credits

Course website: [tps://learn.unt.edu](https://learn.unt.edu)

Course online platform: Blackboard

CONTACT INFORMATION

Dr. J. Michael Spector, Professor

Department of Learning Technologies, University of North Texas
3940 N. Elm Street, G 150, Denton, TX 76207

Office: Discovery Park, G 182

Phone: 940-369-5070 (office)

Email: mike.spector@unt.edu

Websites: <https://faculty.unt.edu/editprofile.php?pid=3614&onlyview=1> /
<https://sites.google.com/site/jmspector007/>

To reach the instructor:

- Regular office hours are Tuesdays and Thursdays 10 am – 12 noon.
- Personal appointments can also be scheduled in advance.
- Email any time and expect a response within 48 hours.
- Post questions using the Blackboard course site and expect a response within 48 hours.

This is an online course that will integrate one or more synchronous video-conference sessions for the presentation of learning environments. We will use GoToMeeting for any video-conference sessions scheduled. These meetings will be scheduled to maximize participation and announced at least one week in advance. Course requirements include submitting a proposal about your Technology-Based Learning Environment (TBLE) to a conference, journal or funding agency and presenting the TBLE to the class.

Upcoming Conferences:

- SITE conference (March 21-25, Savannah, GA, <http://site.aace.org/site-2016-savannah-ga/>)
- AERA conference (April 8-12, Washington, DC <http://www.aera.net/EventsMeetings/AnnualMeeting/2016AnnualMeeting/tabid/15862/Default.aspx>)
- ISTE 2016 (June 26-29, Denver, CO, <https://conference.iste.org/2016/>)
- ICALT conference (25-28 July, Austin, TX, <http://www.ask4research.info/icalt/2016/>)
- ETWC conference (31 July-3 August, Bali, Indonesia, <http://seminars.unj.ac.id/etwc/>)
- AECT conference (October 17-21, Las Vegas, NV, http://aect.site-ym.com/?events_landing)

Relevant Journals:

- [Asia Pacific Educational Review](#)
- [British Journal of Educational Technology](#)
- [Computers and Education](#)
- [Computers in Human Behavior](#)
- [Distance Education](#)
- [Educational Computing Research](#)
- [Educational Researcher](#)
- [Educational Technology Review](#)
- [Educational Technology Research & Development](#)
- [Educational Technology & Society](#) –
- [Evaluation and Program Planning](#)
- [Journal of Applied Instructional Design](#) – AECT sponsored online journal
- [Journal of Computer Assisted Learning](#)
- [Journal of Computers in Education](#)
- [Journal of Computing in Higher Education](#) - available to AECT members
- [Journal of Higher Education](#)
- [Journal of the Learning Sciences](#)
- [Innovative Higher Education](#)
- [Journal of Research on Technology in Education](#)
- [Instructional Science](#)
- [Interpersonal Computing and Technology Journal](#)
- [International Journal of Computer-Supported Collaborative Learning](#) – available to AECT members
- [International Journal of Designs for Learning](#) [International Journal of Teaching and Learning in Higher Education](#)
- [Higher Education](#)
- [Performance Improvement Quarterly](#)
- [Quarterly Review of Distance Education](#) – available to AECT members
- [Review of Research in Education](#)
- [Simulation & Gaming](#)
- [Smart Learning Environments](#)
- [TechTrends](#)
- [Technology, Instruction, Cognition and Learning](#)
- [Educational Technology](#)

Possible Funding Agencies

- National Science Foundation – see http://www.nsf.gov/funding/education.jsp?fund_type=2 and http://www.nsf.gov/funding/pgm_list.jsp?org=ehr
- Institute for Education Sciences – see <https://ies.ed.gov/funding/>
- MacArthur Foundation – see <https://www.macfound.org/programs/learning/>
- Spencer Foundation – see <http://www.spencer.org/what-we-fund>
- Bill & Melinda Gates Foundation – see <http://www.gatesfoundation.org/How-We-Work/General-Information/Grant-Opportunities>
- Texas Education Agency – see http://tea.texas.gov/Finance_and_Grants/Grants/
- National Institutes of Health – see <http://grants.nih.gov/grants/guide/index.html>

COURSE OVERVIEW AND POLICIES**Description:**

This course involves a study of the design and development of technology-based learning environments (TBLEs). It is aimed at developing an understanding of effective methods to keep

students active, constructive, collaborative, intentional, complex, contextual, conversational and reflective in order to maximize learning outcomes. Students are expected to design, implement, or select and present a unit of instruction involving technology-enhanced learning and provide a theory- and research-based rationale for the selected TBLE.

Platform and Basic Technical Requirements:

This online course uses the UNT Blackboard System (<https://learn.unt.edu>) as the main platform for file sharing and communication, although other media may be incorporated based on class needs. Online synchronous sessions will be scheduled using the UNT GoToMeeting system.

Electronic mail:

A university-assigned student email account is the official and preferred means of communication with all students, faculty and support personnel. Students are responsible for all information sent to them via this university-assigned email account. If a student chooses to forward their University email account or to use some other email account, he or she is responsible for all information, including attachments, sent to any other email account. Email sent to the instructor should begin with CECS 6320 in the subject line. Students can also configure their BB course site to have message alerts sent to their email.

Students with Disabilities:

University of North Texas recognizes its responsibility for creating an institutional climate in which students with disabilities can thrive. In accordance with university policy, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the instructor at the beginning of the semester or when given an assignment for which an accommodation is required. Students with disabilities must verify their eligibility through the Office of Student Disability Services.

Plagiarism:

Under all circumstances, you are bound by the UNT policies on academic dishonesty and cheating. Any materials you have used or adapted must be fully credited and the original author and location fully cited. Any verified act of plagiarism, no matter how seemingly-small or inconsequential, will result in an F in the course and sanctions by the University.

GRADING CRITERIA

Allocation of Grade Points:

- | | |
|-----------|---|
| 20 points | <p>Course participation</p> <ol style="list-style-type: none"> 1. Online weekly discussion participation (3 postings a week, with about 40 postings during the semester; potential of 10 points) 2. GoToMeeting online sessions (about 2 meetings; potential of 10 points) |
|-----------|---|

30 points	Assignment 1: Conference/Journal/Grant proposal
	1. Proposal ideas (5 points)
	2. Proposal outline (5 points)
	3. Proposal drafts (5 points)
	4. Peer reviews (two colleagues; 10 points)
	5. Proposal submission (5 points)
25 points	Assignment 2: TBLE presentation
	1. Deciding a TBLE to present (5 points)
	2. TBLE presentation (10 points)
	3. Providing readings/resources and facilitating discussions (5 points)
	4. TBLE reflections (5 points)
25 points	Assignment 3: Course Paper
	1. Paper draft (10 points)
	2. Peer reviews (5 points)
	3. Final paper (10 points)
5 points	IRB certification certificate

Total = 100 points

Accumulated Grade Points:

- A - 90 – 100
- B - 80 – 89
- C - 70 – 79
- D - 69 and below

Grading Policies:

All assignments are due on the date specified in the syllabus. Five points will be subtracted for each day the assignment is late if without prior notice and approval of a delayed submission. If an assignment is later than one week, and prior arrangements have not been made, the assignment will not be accepted. NOTE: If you are overwhelmed or feeling behind, please contact the instructor before the assignment is due to discuss options.

All students are expected to meet graduate standards by obtaining a "B" average on all assignments. This graduate standard indicates that the work was well done, completed, met stated criteria, represented a strong professional effort, and was turned in on time. Students seeking an "A" will need to demonstrate superior performance through critical thinking, exemplary products, positive and supportive interactions with colleagues and sustained active participation across course activities.

Any assignment that receives less than an 80% may be reworked and resubmitted. In order to gain additional points, participants must indicate what they would like to improve upon and how they plan to do so. Participants will then have one week following receipt of a grade to make revisions. Participants are encouraged to work with their peers and share their work in order to receive feedback prior to due dates.

COURSE OUTLINE

Week	Start Date (ends Sun midnight)	Topics, Tasks and Assignments (Due Dates)
1	Jan. 19	Course introductions and rules of engagement; post an introduction on the week 1 discussion forum.
2	Jan. 25	The Logic of Failure – a discussion about complexity and ways to plan effective responses; IRB due Jan 30; post to the weekly discussion forum and participate in the discussion.
3	Feb 1	Assign 1: Conf./Journal/Grant proposal idea due by Sun., Jan 31; post to the discussion forum and to the assignment drop box; participate in the weekly discussion forum. Post the IRB certificate with an expiration no earlier than May 1, 2017.
4	Feb. 8	Assign 1: Conf./Journal/Grant proposal outline due by Sun., Feb. 14; post to the discussion forum and the assignment drop box and participate in the weekly discussion forum.
5	Feb. 15	Assign 1: Conf./Journal/Grant proposal draft due by Sunday, Feb. 21; post to the discussion forum and the assignment drop box and participate in the weekly discussion forum.
6	Feb. 22	Assign 1: Conf./Journal/Grant peer review due by Sunday, Feb. 27; post comments (strength, limitations, recommendations) to two conference proposals of peers to the discussion forum.
7	Feb 29	Assign 1: Conf./Journal/Grant final proposal due by Sun. Mar. 6; post the final proposal to the assignment drop box; participate in weekly the discussion forum.
8	Mar. 7	Assign 2: TBLE selection and rationale due by Mar. 13; post the rational to the weekly discussion forum and comment on those posted by peers.
9	Mar.14	Spring Break – work on the TBLE
10	March 21	Assign 2: TBLE development and elaboration; comments on evaluation due Mar. 27; post to the weekly discussion forum and discussion proposals of peers.
11	Mar. 18	Assign 2: TBLE presentations – to be scheduled that week; participate in the video-conference and post to the weekly discussion forum; post final presentations to the assignment drop box
12	Apr. 4	Assign 2: TBLE presentations – to be scheduled that week; participate in the video-conference and post to the weekly discussion forum; post final presentations to the assignment drop box

13	Apr. 11	Assign 2: TBLE reflections – due Apr. 17; post comments to the weekly discussion forum; also post a one paragraph description of each of 3 relevant readings or resources for your TBLE.
14	Apr. 18	Assign 3: Course Paper (draft) – due Apr. 24; post to the discussion forum and to the assignment drop box; participate in the weekly discussion forum; the paper can be a conceptual paper based on the readings and resources involved in the development of your TBLE; it should not be identical to your proposal paper.
15	Apr. 25	Assign 3: Course Paper (2 peer reviews) – due Apr. 28; participate in the weekly discussion forum
16	May 2	Assign 3: Course Paper (final submission); post paper to the assignments drop box by May 8

READINGS AND RESOURCES

Required Readings:

1. Dörner, D. (1996). The logic of failure: Recognizing and avoiding error in complex situations (Trans. R. Kimber & R. Kimber). Cambridge, MA: Perseus Press.
2. Gagné, R. M., & Merrill, M. D. (1990). Integrative goals for instructional design. *Educational Technology Research & Development*, 38(1), 23-30. [Available through ERIC's online edition of *The Legacy of Gagné* created by J. M. Spector – see Chapter 5 – located at <http://files.eric.ed.gov/fulltext/ED445674.pdf>.]
3. Spector, J. M., Johnson, T. E., & Young, P. A. (2014). An editorial on research and development in and with educational technology. *Educational Technology Research & Development*, 62(2), 1-12. [Available at no cost for AECT members through the AECT Website located at www.aect.org.]
4. Spector, J. M. (2014). Conceptualizing the emerging field of smart learning environments. *Smart Learning Environments*, 1(2). Retrieved from <http://link.springer.com/article/10.1186/s40561-014-0002-7> [This is an open access journal.]
5. Lowyck, J. (2014). Bridging learning theories and technology-enhanced environments: A critical appraisal of its history. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop, *Handbook of research on educational communications and technology* (4th ed.; pp. 3-20). New York: Springer. [This and all prior editions of the Handbook are available online at no cost to AECT members through the AECT Website located at www.aect.org.]
6. Jonassen, D. H. (2014). Assessing problem solving. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop, *Handbook of research on educational communications and technology* (4th ed.; pp. 269-288). New York: Springer. [This and all prior editions of the Handbook are available online at no cost to AECT members through the AECT Website located at www.aect.org.]

Recommended Reading:

1. Spector, J. M. (2015). *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives* (2nd ed.). New York: Routledge.
2. Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research & Development*, 50(3), 43-59. Retrieved from <http://mdavidmerrill.com/Papers/firstprinciplesbymerrill.pdf>
3. Merrill, M. D. (2013). *First principles of instruction: Identifying and designing effective, efficient and engaging instruction*. San Francisco, CA: Wiley.
4. Larson, M., B., & Lockee, B. B. (2014). *Streamlined ID: A practical guide to instructional design*. New York: Routledge.
5. Ertmer, P. A., Quinn, J. A., & Glazewski, K. D. (2013). *The ID CaseBook: Studies in instructional design* (4th ed.). New York: Pearson.
6. Spector, J. M. (Ed.) (2015). *The SAGE encyclopedia of educational technology*. Thousand Oaks, CA: Sage.
7. Spector, J. M., Merrill, M. D., Elen, J., & Bishop, M. J. (Eds.) (2014). *The Handbook of research on educational communications and technology* (4th ed.). New York: Springer. [Available online at no cost to AECT members along with the previous three editions of the Handbook; see www.aect.org].

DISCUSSION REQUIREMENTS

Discussions regarding papers and readings will be conducted through the weekly online forums and the synchronous online class sessions. The participants are expected to:

- Participate in and facilitate discussions on a regular weekly basis
- Show a practical understanding of readings as reflected in postings
- Contribute original ideas and critiques
- Incorporate and respond to the perspectives of colleagues
- Show willingness to participate as a member of the scholarly community

It is expected that every participant post 3 or more substantive but succinct postings on the discussion forum every week. Post both original thoughts regarding the readings and respond to the postings of colleagues. Respect is expected from everyone, along with constructive challenge and criticism. All participants should progress at a similar pace (following the weekly schedule and assignments). This effort is distributed over time and the whole class will benefit from more focused and synergistic discussions around the readings and topics. Therefore, please be sure you keep up with readings and postings.