PERFORMANCE LEARNING SYSTEMS

COURSE SYLLABUS

Excellent by training. Passionate by choice.

Merging Educational Goals and Interactive Multimedia Projects®

Merging Educational Goals and Interactive Multimedia Projects leads educators from entry-level use of technology to an integration of new technologies into classroom activities and projects. Educators develop student-centered interactive multimedia projects that engage students in the learning process while gaining an understanding themselves of the latest in educational goals for America's schools. As a result, students are empowered with control and presentation of content.

To the right are the key areas of focus for the 45-hour course. For more information, refer to the syllabus, which provides a detailed outline of the course material as well as a bibliography of research on which the course is based.

In this course, participants will

- Utilize a real-world model to integrate technology tools across curricular subject-area standards through specific steps of requirement analysis, test criteria, design, coding, and ongoing assessment.
- Develop a learning environment that reflects real-world problem solving that places students beside teachers working in collaborative teams.
- Integrate curriculum and National Educational Technology standards into interactive multimedia projects, created with technology tools that support learning theories.
- Apply the power of multimedia (computers, VCRs, laserdisc players, scanners, and audio devices) to interactive projects that are meaningful for learners.
- Use assessment strategies based on performance during the development of a project based on a real-world model.

72 Lone Oak Drive • Cadiz, KY 42211
(270) 522-2000 • (866) PLS-CLAS (2527) • www.plsweb.com

Merging Educational Goals and Interactive Multimedia Projects®

Course Description

In response to the growth in educational technology, as well as increasing expectations for its regular implementation in the classroom, Performance Learning Systems® has created *Merging Educational Goals and Interactive Multimedia Projects*, a course designed to help experienced and beginner educators in all subject areas develop expertise in using technology effectively to support and enhance learning in their classrooms. In addition to studying new and existing technologies, participants will learn to use multimedia tools (graphic-input devices, scanning devices, video capture, portable disc storage, presentation devices, audio-recording dubbing, authoring software, and graphic-construction software) for three specific instructional purposes: to increase the effectiveness of their instructional delivery of content; develop interactive, engaging, standards-based learning experiences for students; and create an environment that reflects real-world problem solving, where students work collaboratively with their teachers to meet curriculum standards and where finding meaning through problem-solving, collaborating, researching, designing, testing, and communicating is an everyday event.

Course Outcomes

Upon completion of this class, the learner is expected to be able to:

1. Discuss and apply current, validated research underlying the theory, principles, and practices of merging educational goals and interactive multimedia projects.
2. Analyze the differences between a teacher-centered classroom and a learner-centered, meaning-making classroom, and how technology must be interactive.
3. Discuss the expectations placed on today's teachers to use technology in their classrooms, the range of skills teachers need to learn as a result, and the standards that guide instruction and professional development by accessing and applying the NETS standards.
4. Distinguish among types of interactive multimedia projects (IMPs) and their purposes in the teaching/learning process (information acquisition, online correspondence, competitions, interactive writing projects, online conferencing, multimedia presentations, electronic field trips, WebQuests, etc.).
5. Describe the ideal learning environment of technology-infused classrooms and the qualities of the teacher-student relationship in a collaborative setting, including the critical-thinking skills that are supported.
6. Identify examples and explain the functions of multimedia software and hardware, including the following: computer, graphics, scanning, video capture, storage devices, presentation media, audio recording/dubbing, authoring software, and graphic construction.
7. Demonstrate instructional applications of multiple technologies, including graphic-construction software and linear and nonlinear PowerPoint presentations.
8. Create and post an online activity that integrates curriculum goals and technology.
9. Identify and explain the processes involved in each step of the Project Life Cycle (PLC) Model for creating interactive multimedia projects.
10. Plan, create, demonstrate, and evaluate an interactive multimedia project using the Project Life Cycle plan.

11. Identify and explain copyright issues pertaining to the construction of multimedia projects in the classroom.
12. Generalize course content to reflect how the diverse populations within classrooms have their needs met by the application of the skills, strategies, and knowledge gained in this course.
13. Reflect on and continuously evaluate personal practice to realign and actively seek out opportunities to grow professionally using the knowledge and skills learned in this course.
14. Work collaboratively to share knowledge, skills, and experiences, refine understanding of content, give and receive feedback, and improve expertise.

Institutional Outcomes
(To be listed here)

Required Text
Selected research articles, research summaries, and topical articles drawn from educational literature

Topical Outline	List of Concepts
Course Overview	Changes in teacher responsibilities, technology as a part of daily life, using technology to empower learning, bringing technology into the classroom effectively, research supporting multimedia-based learning
The Teacher's Mission	Using technology for professional development, developing professional expertise and knowledge, using technology to relate to students, the ability of technology-enhanced learning to support higher order thinking, the appropriateness of problem-based learning, the impetus behind technology in education (Education Goals 2000), the standards of the International Society for Technology in Education (ISTE), the WebQuest process
Reforming Education	Ramifications of Goals 2000 funding on teacher preparation and professional development requirements; rigorous new standards for teaching and learning; the Preparing Tomorrow's Teachers to Use Technology Act of 1994; the media/technology-savvy student population: Generation Y theories of learning that support multimedia technologies—Glasser's Five Areas of Need, the PLS® Questions for Life™ model, Gardner's Multiple Intelligences, cooperative learning, constructivist theories (conditions for learning, lateral thinking, situated learning, social-development theory, experiential learning), the five major qualities of constructivist learning (active, cumulative, integrative, reflective, goal-directed), and the Learning Triangle model (linking instructional methods with retention rates)

Interactive Multimedia Projects	Ideal qualities of an interactive multimedia classroom, definition of "multimedia," ways in which multimedia stimulate all levels of cognition in Bloom's taxonomy, multimedia as tools for both teacher and student, qualities of interactive multimedia projects (IMPs), levels of IMP complexity, types of IMPs (information acquisition, online correspondence, competitions, interactive writing projects, online conferencing, multimedia presentations, electronic field trips, WebQuests), why IMPs work, setting up the environment, student teams, student jobs, hardware examples and functions (computer, graphic-input devices, scanning devices, video capture, portable disk storage, presentation devices, audio-recording dubbing, multimedia authoring software, graphics construction), management of multimedia, writing for information procedures
Planning the Project	Knowing one's students, examples of first-time projects, starting small, brainstorming with educational goals
The Project Life Cycle	Using a model for project design; the Project Life Cycle (PLC) Model (integration, requirements analysis, test criteria, design, code, alpha testing, beta testing, golden master); purposes for each step; the PLC Lesson Plan Format; processes in each step: *integration* (listing academic curriculum standards and technology standards for both teacher and student), *requirements analysis* (needs assessment, initial description of IMP, clarification of purpose, time frame), *test criteria* (reflection and evaluation criteria, the rubric, formative and summative reflections), *design* (task definition, information-seeking strategies, location and access, use of information, synthesis, evaluation, concept mapping), *code* (media, font, color, transitions, effects, citations), *alpha testing* [with students] and *beta testing* [with the teacher] (to identify bugs and inconsistencies, technical assistance needed, impact on learners, ideas for improvement, potential problems ahead, compliance with rubric), and *golden master* (the finished product; purpose of debriefing)

Course Assessments and Links to Institutional Outcomes and Course Outcomes
Throughout the course, the learner will be assessed and evaluated on the completion of the following assessments. There are 11 assessments in this course, for a total of 200 points.

		Points	Correlations With Institutional Outcomes	Correlations With Course Outcomes
Assessment No. 1:	Self-Assessment and Reflection on Elements of Project-Based Multimedia Learning	10		1, 2, 3, 4, 6, 13
Assessment No. 2:	Bio-Slide	10		4, 13, 14
Assessment No. 3:	The Big Jigsaw	15		1, 2, 6, 13, 14
Assessment No. 4:	The Big Jigsaw—Application	20		1, 2, 4, 6, 7, 12, 13, 14
Assessment No. 5:	Photo Editing Project and Analysis	15		3, 6, 7, 12, 13
Assessment No. 6:	Create an FYI	10		2, 3, 4, 6, 7, 12
Assessment No. 7:	Linear PowerPoint Project and Analysis	25		2, 3, 4, 5, 6, 7, 13
Assessment No. 8:	Multimedia Project Plan Using the Project Life Cycle	25		5, 9, 10
Assessment No. 9:	Building Non-Linear PowerPoints	25		1, 3, 7, 8, 12
Assessment No. 10:	Multimedia Montage	35		6, 7, 8, 11, 12, 13
Assessment No. 11	Fab Five: Internet Site Search and Evaluation	10		1, 5, 12, 13, 14
	Total	**200**		

Criteria specific to each assessment will be explained in conjunction with the instructional activities.

Instructional Materials
Instructors and learners will use instructor-generated materials, learner-generated materials, print resources, and Web-based resources to facilitate learning.

Instructional Methodology
The instructional methodology of this course focuses on developing, enhancing, and improving the instructional expertise and pedagogical knowledge base of practicing educators. Strategies include instructor presentation of new content through short lecturebursts, active construction of knowledge during hands-on practice and problem solving, collaborative group work, personal reflection, in-class presentations and demonstrations, ad hoc and structured small-group or whole-class discussion, analysis of assigned reading, and application of course content and skills to each participant's individual grade level, subject area, and classroom.

Evaluation
The evaluation of learner work will be based on the defined criteria for learner assessments, which will be processed with learners prior to their instructional activities and engagement with the student learning targets (outcomes). Grading is based solely on the evaluation of student learning targets and defined criteria for learner assessments.

Formative assessment of learning outcomes is conducted throughout the course, using a variety of means that include the following: completion of assessments; constructive contributions to class discussions (whole-class as well as small-group); sharing of valuable, pertinent, and/or applicable ideas and experiences; involvement in the inductive process; interactive journal entries with written instructor feedback; critical or reflective responses to assigned readings; oral discussions in a whole-class or small-group setting; active participation and general attentiveness to the instructor and others. It is expected that each student will contribute to the academic quality of the course.

Summative assessment includes the completion of a culminating assignment that requires the participant to synthesize class content, apply it to his or her specific teaching situation, and complete a reflective action plan for implementing the major components of content and skill acquired during the course.

Grading Policy
(To be listed here)

Absence and Tardy Policy
(To be listed here)

Performance Learning Systems' Academic Integrity Policy
Performance Learning Systems expects absolute academic honesty and integrity from every course participant. The specific Academic Integrity and Honor Code Policies of our partner colleges and universities are embraced and enforced by PLS instructors. The following are considered to be serious violations:

- Plagiarism: the use of another's ideas, data, or words without proper acknowledgement.
- Fabrication: the use of invented information or the falsification of research or other findings with the intent to deceive.
- Collusion: improper collaboration with another in preparing assignments or projects.
- Cheating: an act of deception by which a student misrepresents that he or she has mastered information on an academic exercise that he or she has not mastered.
- Academic Misconduct: tampering with grades, or taking part in obtaining or distributing any part of student work that is not his or her own.

Violation or suspected violation will be investigated and pursued according to specific college/university procedures.

Identity Authentication
The college/university, Performance Learning Systems (PLS), and students share a joint responsibility to ensure that each student's contribution in an online course activity comes from that student alone. For the student, this responsibility has two parts:

1. Students are responsible for positively ensuring that every contribution to an online course created with the students' computer account is made by the student alone. Contributions covered under this policy include: written assignments; quiz and exam submissions; discussion forum postings; live participation in text-based chat sessions, phone conferences, and videoconferences. If a student allows another person to write or make any kind of submission to an online activity in the student's name, then this constitutes cheating and will be treated as a violation of academic honesty.
2. Students are responsible for ensuring the integrity of their computer account security by following the actions required of them by the PLS Acceptable Use Policy. These actions include keeping passcodes private, updating passcodes when required by Performance Learning Systems, and reporting breaches of the security policy to the IT Helpdesk.

Participant Professionalism Policy

As a courtesy to other participants and to your instructor, please refrain from text messaging, checking e-mail, or answering your cell phone during class time. Breaks are provided throughout the course so you can attend to personal matters. Using your personal electronic devices during class time is distracting and disrupts instruction and participant communication and collaboration. If you have an emergency or justifiable reason to leave your cell phone turned on during class time, please make arrangements with the instructor prior to the beginning of class.

Course Outcome Correlations With INTASC Standards for Teachers

	Course Outcomes
Standard 1: Subject Matter The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.	**4, 5, 6, 7, 8, 9, 10, 11, 12**
Standard 2: Student Learning The teacher understands how children and youth learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.	**1, 2, 4, 5, 6, 9, 10, 11, 12**
Standard 3: Diverse Learners The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.	**4, 6, 7, 8, 9, 10, 11**
Standard 4: Instructional Strategies The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.	**4, 5, 6, 7, 8, 9, 10**
Standard 5: Learning Environment The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.	**1, 2, 4, 6, 11**
Standard 6: Communication The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.	**1, 3, 4, 5, 6, 7, 8, 9, 10**
Standard 7: Planning Instruction The teacher plans and manages instruction based upon knowledge of subject matter, students, the community, and curriculum goals.	**9, 10, 11**
Standard 8: Assessment The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.	**10, 11**
Standard 9: Reflection and Professional Development The teacher is a reflective practitioner who continually evaluates the effects of her/his choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.	**11, 13**
Standard 10: Collaboration, Ethics, and Relationships The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.	**14**

The Interstate New Teacher Assessment and the Support for Consortium (INTASC) standards were developed by the Council of the Chief State School Officers and member states. Copies may be downloaded from the Council's website at http://www.ccsso.org.

Course Outcome Correlations With National Board of Professional Teaching (NBPTS) Five Core Propositions

Proposition 1: Teachers are Committed to Students and Their Learning.	**Course Outcomes**
NBCTs are dedicated to making knowledge accessible to all students. They believe all students can learn.	**2, 4, 5, 6, 12**
They treat students equitably. They recognize the individual differences that distinguish their students from one another and they take account for these differences in their practice.	**1, 2, 4, 6, 8, 10, 11, 12**
NBCTs understand how students develop and learn.	**1, 2, 4, 6, 12**
They respect the cultural and family differences students bring to their classroom.	**12**
They are concerned with their students' self-concept, their motivation and the effects of learning on peer relationships.	**2, 5, 12**
NBCTs are also concerned with the development of character and civic responsibility.	**2, 5, 12**
Proposition 2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students.	
NBCTs have mastery over the subject(s) they teach. They have a deep understanding of the history, structure and real-world applications of the subject.	**1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13**
They have skill and experience in teaching it, and they are very familiar with the skills gaps and preconceptions students may bring to the subject.	**1, 2, 5, 7, 8, 10, 12, 13**
They are able to use diverse instructional strategies to teach for understanding.	**4, 5, 6, 7, 8, 9, 10, 11, 12**
Proposition 3: Teachers are Responsible for Managing and Monitoring Student Learning.	
NBCTs deliver effective instruction. They move fluently through a range of instructional techniques, keeping students motivated, engaged and focused.	**2, 5, 7, 8, 9, 10, 12, 13**
They know how to engage students to ensure a disciplined learning environment, and how to organize instruction to meet instructional goals.	**1, 2, 4, 6, 7, 8, 9, 10, 11, 12**
NBCTs know how to assess the progress of individual students as well as the class as a whole.	**5, 7, 8, 9, 10**
They use multiple methods for measuring student growth and understanding, and they can clearly explain student performance to parents.	**5, 7, 8, 9, 10**
Proposition 4: Teachers Think Systematically about Their Practice and Learn from Experience.	
NBCTs model what it means to be an educated person – they read, they question, they create and they are willing to try new things.	**1, 4, 14**
They are familiar with learning theories and instructional strategies and stay abreast of current issues in American education.	**1, 4, 5, 6, 7, 8, 9, 10**
They critically examine their practice on a regular basis to deepen knowledge, expand their repertoire of skills, and incorporate new findings into their practice.	**3, 13, 14**

Proposition 5: Teachers are Members of Learning Communities.

NBCTs collaborate with others to improve student learning.	**9, 10, 11, 14**
They are leaders and actively know how to seek and build partnerships with community groups and businesses.	**9, 10, 11, 14**
They work with other professionals on instructional policy, curriculum development and staff development.	**3, 14**
They can evaluate school progress and the allocation of resources in order to meet state and local education objectives.	**3, 14**
They know how to work collaboratively with parents to engage them productively in the work of the school.	**14**

Bibliography

Adams, C. M., & Pierce, B. L. (2006). Creative thinking. In F. A. Dixon & S. M. Moon (Eds.), *The handbook of secondary gifted educati*on (pp. 343-361). Waco, TX: Prufrock Press.

Ashburn, E. A., & Floden, R. F. (Eds.). (2006). *Meaningful learning using technology: What educators need to know and do*. New York: Teachers College Press.

Atkinson, G. (2005). *Beyond bullet points: Using Microsoft PowerPoint to create presentations that inform, motivate and inspire*. Redmond, WA: Microsoft Press.

Cunningham, C. A., & Billingsley, M. (2006). *Curriculum webs: Weaving the web into teaching and learning* (2nd ed.). Boston: Allyn & Bacon.

Gage, J. (2006). *How to use an interactive whiteboard really effectively in your secondary classroom*. London: David Fulton.

Gould, T., & Thrasher, T. (2006). *Real success in the virtual classroom: A guide to e-learning*. Durham, NC: Carolina Academic Press.

Kaltman, G. S. (2006). *More help! for teachers of young children: 99 tips to promote intellectual development and creativity*. Thousand Oaks, CA: Corwin.

Kaufman, J. C., & Baer, J. (Eds.). (2005). *Creativity across domains: Faces of the muse*. Mahwah, NJ: Lawrence Erlbaum.

Marshall, S. P. (2006). *The power to transform: Leadership that brings learning and schooling to life*. San Francisco: Jossey-Bass.

Mayer, R. E. (Ed.). (2005). *The Cambridge handbook of multimedia learning*. New York: University of Cambridge.

Morrison, G. R., & Lowther, D. L. (2005). *Integrating computer technology into the classroom* (3rd ed.). Upper Saddle River, NJ: Merrill, Prentice Hall.

Nilson, L. B., & Weaver, B. E. (Eds.). (2005). *Enhancing learning with laptops in the classroom*. San Francisco: Jossey-Bass.

O'Neil, H. F., & Perez, R. S. (Eds.). (2006). *Web-based learning: Theory, research, and practice*. Mahwah, NJ: Lawrence Erlbaum.

Roblyer, M. D. (206). *Integrating educational technology into teaching* (4th ed.). Upper Saddle River, NJ: Merrill, Prentice Hall.

Sharp, V. (2005). *Computer education for teachers: Integrating technology into classroom teaching* (5th ed.). Boston: McGraw-Hill.

Slator, B. M. (2006). *Electric worlds in the classroom: Teaching and learning with role-based computer games*. New York: Teachers College Press.

VanGundy, A. (2005). *101 activities for teaching creativity and problem solving*. San Francisco: Pfeiffer.

Zongmin, M. (2006). *Web-based intelligent e-learning systems: Technologies and applications*. Hershey, PA: Information Science.