

BAD 64080 - Emerging Hardware and Software Technologies - SYLLABUS Fall 2009

Kent State University Management & Information Systems Department

Instructor:	Dr. Alan A. Brandyberry
Class Times:	6:15 pm-8:45 pm Wednesday, 215 Business Administration Building
Office Hours:	Monday 4:00-6:00pm, 8:45-9:15pm; Wednesday 4:00-6:00pm, 8:45-9:15pm (and by appointment)
Office:	A425 Business Administration Building
Phone:	330-672-1146
Email:	abrandyb@kent.edu (preferred contact method - please put 64080 somewhere in subject line)
Web Site:	http://vista8.kent.edu/
Catalog Description:	Investigation of selected emerging hardware and software technologies such as parallel processing systems, computer languages and operation systems, artificial intelligence, neural networks and chaos theory.
Prerequisites:	Graduate standing and permission of instructor.
Semester Topics:	<p>Strategic Management of Emerging Technologies:</p> <ul style="list-style-type: none">• Innovation Theories:• Diffusion, Infusion, Adoption, & Implementation of Innovations• Applying Innovation Theories to Business Cases <p>Specific Emerging Technologies:</p> <ul style="list-style-type: none">• What are the emerging technologies of today?• How may these technologies affect management today and in the near future?• What are the likely technologies of the future (3-10 years) and how will these likely impact management?

Applied Learning:

- Student applied projects and informational presentations.

**Required
Texts:**

Electronic Sources including [Safari](#).

**Attendance,
Preparation,
&
Participation:**

The material that is to be discussed in class should be read by the student before class. Attendance will be taken and whenever you are not present you will miss activities that cannot be made up. Missing class or portions of class will reduce your attendance/participation grade correspondingly. Students should be prepared to discuss the reading material, assigned cases and discussion or review questions. Failure to prepare and participate will also reduce this portion of your grade.

**Cases
&
Assignments:**

Students will be required to submit periodic written cases and computer assignments for credit. These assignments will be described and assigned on a weekly basis.

**Current
Events:**

Each week every student will bring in an article from an applied online or paper source that deals with identifying an Emerging Technology or with issues pertaining to managing or implementing the technology. You will turn in a copy of the paper with your name and the date submitted.

Be prepared to discuss in class:

- What is the technology?
- What makes it "Emerging"?
- Why this article is of interest to the class.
- The managerial implications of the technology and the article.

Project/Paper:

Projects can range from very technically-oriented (such as programming web services, integrating systems using XML or other techniques, cloud computing architectures, developing and implementing genetic algorithms, etc., etc.) to the completely non-technical. Non-technical projects usually take the form of a research paper where students investigate a topic in-depth. Examples of potential topics include: investigating the management and strategic issues associated with the implementation of any emerging technology in organizations; emerging technologies associated with "green" computing such as green data centers; and emerging technologies associated with combating increasing security threats such as viruses, worms, and cyber-terrorism (just some examples - there are literally thousands of potential topics to choose from). Class time during this

phase will consist of project reports and feedback sessions.

Examinations: We will have only one exam, this will be around the midterm and will cover the management of emerging technologies material. This exam will be administered on an open-note, open-book policy and will consist of short answer, short-essay, and essay type questions. Any notes written by the student may be used by the student (photocopies of other student's notes or original copies of other students notes from this or other classes are not acceptable). Only the books/articles/other materials used in this course. Books, notes, and any other test material may not be shared. Note: Please do not assume that since it is open book that you do not have to study! You should study the material as if these tests were closed book. Most of your responses will have to come from your own knowledge; you will not have time to look up/learn all the material during the exam. Use your book/notes to remind you of lists, a few forgotten definitions, etc., the concepts should already be known to you.

Students may feel free to inquire into any aspect of examinations or their scores during office hours. However, to encourage quick resolution of problems or concerns which may arise, issues must be raised with the instructor within two weeks following return of the exam. If the instructor is not contacted prior to that time the examination will be considered closed and grades finalized.

Attendance Policy: Students are responsible for all in class announcements and material whether absence is excused or unexcused. Missed assignments will not be made up. In certain cases (emergencies) the score will be dropped. All other cases receive a score of zero. Four or more unexcused absences will result in a zero score for the attendance/participation grade. Less than four unexcused absences will reduce the grade accordingly.

Academic Dishonesty: Any student found to be engaged in cheating, plagiarism, or any form of academic misconduct in this course, whether on exams or any other assignment, will automatically receive a grade of "F" for the course. Other actions may be taken by the College of Business Administration and/or the University. This policy is to protect the majority of students who are honest.

Access: In accordance with university policy, if you have a documented disability and require accommodations to obtain equal access to this course, please contact the instructor during the first week of the semester. Disabilities must be documented through the Office of Student Disability Services located in the Michael Schwartz Center.

Grading: POINTS

Exam	200 (31%)
Attendance/Participation	50 (8%)
Assignments	100 (15%)
Current Events	100 (15%)
Final Project/Paper	200 (31%)
Total	650 (100%)

The following scale indicates the minimum course percentage required for each letter grade:

Letter-grade determinations will be made on the following percentage basis (your score rounded to the nearest whole number): A ≥ 93 ; A- 90-92; B+ 87-89; B 83-86; B- 80-82; C+ 77-79; C 73-76; C- 70-72; D+ 67-69; D 60-66 F < 60 . A *lower* curve may be substituted at the discretion of the instructor. Grade curving is only done at the end of the term for final grades. Do not try to anticipate the curve - target the score that will get you the desired grade on the straight scale above. Students are welcome at any time to inquire into their current grade status.

Grading
Miscellaneous:

No "extra credit" will be considered. I often am requested to provide extra credit work to students who are not satisfied with their current scores. Although I appreciate the willingness to do extra work, the concept of extra credit does not function in courses where a curve may be applied to the final grades. In this environment, students are penalized if they do not do the extra credit work, which should not be the case.

"Incompletes" and "In Progress" grades will only be given in cases where unforeseeable and unavoidable circumstances have made it impossible to complete the work required for the course in time. Although I do understand that many of you work, have family obligations, and may be taking other courses, you are expected to adjust your course loads so you can allot sufficient time to the courses you are taking. If you choose to overload yourself, you will have to live with the consequences.

That said, please contact me with any problems you are having with the course. I may not be able to offer you extra credit or an incomplete but I will do anything in my power (that is ethical and upholds the academic integrity of myself and the university) to make this course a positive and successful learning experience for all students who are willing to put in the effort required.

TENTATIVE SCHEDULE:

Day	Topics	Readings (topics will be updated on a regular basis in order to make sure we are dealing with the most current information available)
Sep 02	Course Introduction What is an 'emerging technology'? What is an innovation? What does adoption and diffusion mean?	<ul style="list-style-type: none"> • Diffusion.ppt • Innovation.ppt
Sep 09	Current research concerning adoption of emerging technologies. Technology acceptance models...what can we learn from them? <i>Assignment # 1 Due.</i>	<ul style="list-style-type: none"> • Venkatesh et al. 2003 (do not focus on the statistics and methodology – look at the models). • Cloud Computing Case
Sep 16	Determinants of organizational innovation. The first mover paradox. Crossing the chasm. (Lots of reading so no written assignment due.)	<ul style="list-style-type: none"> • Damanpour, 1991 (again, do not get bogged down in the stats) • Christensen I • Christensen II • Linowes (Summary of Moore's "Crossing the Chasm")
Sep 23	Absorptive Capacity. Assimilation Gaps. <i>Assignment # 2 Due.</i>	<ul style="list-style-type: none"> • Xerox Case Handout • Cohen and Levinthal, 1990 • Fichman & Kemerer, 1999
Sep 30	Integrating Technology and Strategy	TBA

Oct 07	Design and Evolution of a Technology Strategy	TBA
Oct 14	Enactment of Technology Strategy: Developing the Firm's Innovative Capabilities. Selection of Student Emerging Technology Topic and Project: Introduction	TBA
Oct 21	Midterm Exam	
Oct 28	Specific Emerging Technologies – all students present their course project proposals. Proposals due at class time.	
Nov 04	Specific Emerging Technologies – selected student and instructor presentations and student/instructor project consultation.	
Nov 11	Veteran's Day Observance	
Nov 18	Specific Emerging Technologies – selected student and instructor presentations and student/instructor project consultation.	
Nov 25	Thanksgiving Recess	
Dec 02	Specific Emerging Technologies – selected student and instructor presentations and student/instructor project consultation.	
Dec 09	Specific Emerging Technologies – selected student and instructor presentations and student/instructor project consultation.	
Dec 16	Project Presentations – Final Projects Due	

The Following Policies Apply to All Students in this Course

- A.** Students attending the course who do not have the proper prerequisite risk being deregistered from the class.
- B.** Students have responsibility to ensure they are properly enrolled in classes. You are advised to review your official class schedule (using Student Tools on FlashLine) during the first two weeks of the semester to ensure you are properly enrolled in this class and

section. Should you find an error in your class schedule, you have until Sunday, September 6, 2009 to correct the error. If registration errors are not corrected by this date and you continue to attend and participate in classes for which you are not officially enrolled, you are advised now that you will not receive a grade at the conclusion of the semester for any class in which you are not properly registered.

C. Academic honesty: Cheating means to misrepresent the source, nature, or other conditions of your academic work (e.g., tests, papers, projects, assignments) so as to get undeserved credit. The use of the intellectual property of others without giving them appropriate credit is a serious academic offense. It is the University's policy that cheating or plagiarism result in receiving a failing grade (0 points) for the work or course. Repeat offenses may result in dismissal from the University.

D. For Fall 2009, the course withdrawal deadline is Sunday, November 8, 2009. Withdrawal before the deadline results in a "W" on the official transcript; after the deadline a grade must be calculated and reported.

E. Students with disabilities: University policy 3342-3-18 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through the Student Accessibility Services (contact 330-672-3391 or visit <http://www.registrars.kent.edu/disability/> for more information on registration procedures).