



GIMBA PROGRAM

BUS 6180: Information Technology Management

Fall 2020

Instructor: Li, Eldon Y.
Office: Online at LINE ID: eldonyli1
E-mail: eldonyli@gmail.com / eli@calpoly.edu
Phone: Cell: 0973-819770 / Skype ID : eldonyli
Class Hours: 10/17-18/9:00-18:00;
10/23/18:00-22:00;
10/24-25/9:00-18:00
Classroom: CCU Liaison Office near Taipei Main Station
Office Hours: By appointment
Website: <http://eli.johogo.com/Class/WMU>

1. COURSE OBJECTIVES

This course provides frameworks, tools and skills and comfort in the understanding and use of information technology (IT) in business from the point of view of a business manager, an IT manager and an employee in a functional area. It is designed to introduce the basic concepts and applications of IT and its impact on individual users, groups, organizations, and society. The topics in this course include applying IT for competitive advantage, organizational aspects of IT, innovation and emerging technology, globalization, and some ethical issues related to utilization of IT. The course will be conducted in English. All presentations, discussion, and research report must be in English.

2. EXPECTED OUTCOMES:

Students will be able to:

- (1) Be knowledgeable of and able to use frameworks and tools relating to the strategic and operational use of IT in business. Topics include, for example, alignment of business strategy with the role and strategy for IT investments, digitization and transformation of business and organizational capability, design and implementation of IT architecture and IT governance, business process management, and supply and outsourcing relationships.
- (2) Instill skills and comfort in decision making around IT project management. Topics include the lifecycle of a project from initial need and justification through selection or development to installation and integration with existing systems to deployment and organizational changes necessary to get business value.

- (3) Understand the necessary basic concepts of business management in relation to IT. The business side includes business strategy and its execution, alternative forms of organizational structure, business processes, and business functions (PO/MS/HL/RD/FA/IT).

3. PEDAGOGY:

The pedagogy of this course is a mix of lectures, seminars, and cases. The students will present reading reports orally in class. The instructor will lecture on business processes, technology tools, and case studies. It is assumed that the class will form a learning community and everyone shares a responsibility to maximize the learning experience for all in the class. This is not an environment where students passively receive knowledge from the professor. Instead, all members in the class are expected to expand their knowledge and understanding and contribute to the growth and development of everyone else in the community. Thus, students are expected to prepare for class sessions, to contribute and discuss by offering ideas that promote interaction, and generally to assist others in maximizing their learning experience.

There is a substantial amount of reading material to be covered in this course. It is rather easy for you to fall behind. Please ensure that you stay current in your readings. It is expected that you read in advance the material to be covered in class on a given day, and are able to discuss it. Failure to prepare will negatively influence your learning outcomes.

4. COURSE POLICIES:

Although no attendance will be taken, meaningful class participation will be a factor in the determination of your grade. As in all classes the more you put into a class the more you get out of it. We encourage the sharing of ideas with the class during class discussions.

You are of course responsible for all material presented in class even if you are absent. If you miss a class you must get notes from someone else in the class and you should designate someone to pick up any handouts for you. If you plan to attend class you must be on time and remain for the entire lecture. Turn off any pagers or cellular phones. We are working hard in teaching this class and expect you to work hard.

Attending class is one thing; what you do while you're there is another. Of course we expect you to be attentive and not disruptive. Being disruptive includes reading newspapers or other books talking to others working on other course assignments etc.; if these things are more important than our discussion you should plan to do them somewhere else not in class. Being attentive implies staying awake, taking notes, and participating in classroom discussions. Obviously if you are working on something else you are not participating in this class.

Finally, anyone who misses 9 class hours will not receive any grade for the class, i.e., the grade score will be "0".

5. REQUIRED READINGS:

5.1. Books

- [1] Brown, C.V., DeHayes, D.W., Hoffer, J.A., Martin, W.E., & Perkins, W.C. (2012). [Managing Information Technology](#), 7th Edition. Upper Saddle River, New Jersey: Pearson Education Inc. (MIT)

- [2] Gallagher, J. (2019). [Information Systems: A Manager's Guide to Harnessing Technology](#), 7th Edition. Boston: Boston Academic Publishing, Inc. (IS7)

5.2. Articles

- [1] Carr, N. (2003). [IT doesn't matter](#). Harvard Business Review, Article r0305b, May, 5-12.
- [2] Agrawal, A., Gans, J., & Goldfarb, A. (2020). [How to win with machine learning](#). Harvard Business Review, 98(5), 126-133.
- [3] Summary of Friedman, T. L. (2005). [The World is Flat](#). Published by CapitolReader.com on October 27, 2005.

6. GRADING POLICY

6.1. Grade Distribution:

Oral presentation and report	(25% x 1)	25%
Article analysis reports	(5% x 3)	15%
Minicase study reports	(5% x 5)	25%
Guest lecture summaries	(6% x 4)	24%
Class participation		11%
Total		100%

6.2. Company/Article Report and Oral Presentations (25%):

Each student can choose one of the following two analyses to prepare a report and make an oral presentation. The presentation is on 10/25 afternoon and must use PPT to answer the following questions in sequence. Please submit to me in class your PPT file to receive the report credit of 5%. During the presentation, you will have up to 15 minutes to present the article to the class, with 1 minute of transition time between presentations. No overtime is allowed during the presentation. The presentation counts 20% of your course grade. If you do not have the PPT handouts ready by your presentation time, you will lose the entire grade. The key to a successful presentation is to present the materials without using any note cards. Layout all the agenda items (i.e., headings only) on the PPT slides. Handout some carefully-selected materials to the audience. Do not let the audience feel that you are not prepared or did not do your homework beforehand. The instructor might ask some questions regarding the issues in the article during the presentation. The quality of your answers will be considered for the class participation grade.

(a) Report on an article relevant to IT and your company's business:

You must search the scholar.google.com website for an article related to IT and your company business practice, preferably from practical journals such as Harvard Business Review, Sloan Management Review, California Management Review, among others. Then, read and orally present the content of this article by answering the following questions:

- (1) What is the full citation of this article?
- (2) What is the purpose of writing this article?
- (3) Why is the article related to your company?
- (4) What are the issues discussed in the article?
- (5) What have you learned from this article?
- (6) What do you plan to do for your company?

- (7) What are the strengths and weaknesses of this article?
- (8) How would you overcome the weaknesses of this article?

(b) Report on your company's IT management status:

If you choose to present and report the IT management status of your company, you must answer to the following set of questions:

- (1) What are the current demographic characteristics of your company?
- (2) What is your company's brief history?
- (3) What is your company's current organizational structure?
- (4) What are your company's/department's business processes?
- (5) What information technologies (ITs) are supporting each business process?
- (6) What are the IT performance areas that need to improve?
- (7) What new information systems are needed to support more business processes?
- (8) What are your recommendations to the company's/department's manager?

6.3. Report Assignments for Articles and Minicases (40%):

Every student must read each assigned article/minicase and prepare to discuss it. You will be expected to be prepared to discuss each article/minicase, and are fair game for questions from me or from your classmates.

When you read each article in this course, try to identify the key issues presented by the article or what the article is trying to teach us, the strong and the weak points you found in the article, overall assessment of the article, and additional discussion questions and answers.

On the other hand, minicases are densely written. Unlike standard cases that intermix irrelevant information, in any minicase, each sentence exists for a reason and reflects relevant information. As a result, you must analyze each minicase very carefully so as not to miss critical aspects of the situation. You must determine what is really going on within the organization. What first appears as a straightforward "technology" problem may in fact be a political problem or some other organizational problems. Detective work is, therefore, required. The problem identification and prioritization skills are essential skills for you as a business manager because it is not possible for organizations to tackle all of their problems concurrently. Minicases help you to practice these skills. Best of all, detective work is fun and promotes lively classroom discussion.

6.3.1. Article Analysis – Individual Report (15%)

There are 3 articles listed in Section 5.2 in this document and available for download from the website of this course. Each article analysis report is *one-page long* and must be *submitted individually*. The report should include the following elements.

- (1) Your critics – the weaknesses of the article.
- (2) Your recommendations – what could have been done or added into the article that would make the article better.
- (3) Your further questions for the author of this article.

You may be thinking at this point that you can slop anything together for only one page. Do not make this assumption. The short reports are often harder to write, because you have to make your point clearly and concisely, without a lot of fluff. DO

NOT just toss a bunch of ideas in and call it a report, as this will negatively impact your mark. You must also focus on content and validity of the article. For example, your argument that the article is outdated because it was published many years ago is not sufficient. You must provide your argument and discussion about what have changed, how they have changed, how these changes make the article invalid, etc.

6.3.2. Minicase Study – Group Report (25%)

There are 5 minicase studies:

- (1) Case Study I-4: implementing technologies to support mobile clinics
- (2) Case Study I-6: deciding on a new enterprise-level IT platform
- (3) Case Study II-3: developing a business intelligence capability
- (4) Case Study II-4: mining data to increase government tax revenues
- (5) Case Study II-6: exploring the potential organizational benefits of social media

Each minicase study report is *two-page long* and must be *submitted as a group*. **You must join another student to form a LINE group of 2 persons; there will be only one group with 3 students.** In each minicase study report, your group must:

- (1) Identify the most important or the most critical issue that leads to the problem in the minicase;
- (2) Analyze this most important or most critical issue; then, provide your suggestions about what should be done;
- (3) Identify any additional issues;
- (4) Analyze these additional issues; then, provide your suggestions about what should be done and set the priority for each of them.

For both article analysis and minicase study reports, you may employ any stylistic elements you wish to make your reports readable, but you should communicate your points clearly and concisely. Please don't just toss a lot of ideas into a document and call it a report. Please note that correct grammar/spelling, clear communication of your points, and overall readability will go a long way toward determining your mark on the report. There are various online software tools available free to authors, e.g., [Grammarly Basic](#) could be downloaded and installed free of charge and is highly recommended.

6.4. Guest Lecture Summaries (24%):

Four IT experts will be invited to guest lecturer the following topics. The 150 minutes of lecture will be allocated approximately in the format of 1/2 on explaining the technical details, 1/4 on giving examples of business applications, and 1/4 on interactive case discussion. Each student is required to submit a summary (6% each) of what you have learnt from the lecture at the end of the class.

- (1) Telecom Service and its business application cases
- (2) Blockchain Security and its business application cases
- (3) Data Analytic for business strategy with application cases
- (4) Big Data Analytic and its business application cases

6.5. Class Participation (11%):

You are expected to attend each class on time with the assigned readings prepared in advance and to contribute to the class discussion either by starting the discussion or building on the contribution of others to move the discussion forward. The sharing of

your experience and insights is a key part of the leaning process. To build on the contribution of others requires you to listen and to consider the timing of your participation.

The quality and frequency of your contribution will be taken into account in the grading scheme and will include the quality of your responses when cold called. You will be evaluated after every class session using the following criteria. Please note that contributions are NOT equivalent to only attending class or talking in class. The quality of what is said and of one's listening and responding to others are important components of my evaluation.

- (A) Excellent Participation: (1) regularly initiates class discussions; (2) contributes consistently to class discussions; (3) regularly gives indication of substantial knowledge and insights; (4) frequently facilitates others in clarifying and developing their own viewpoints; (5) regularly builds on the thinking of others and integrates that thinking into own contributions to produce a larger synergistic understanding of the issues being discussed.
- (B) Good Participation: (1) frequently initiates class discussions; (2) contributes consistently to class discussions; (3) regularly gives indication of substantial knowledge and insights; (4) occasionally facilitates others in clarifying and developing their own viewpoints.
- (C) Fair Participation: (1) occasionally initiates class discussions; (2) contributes occasionally to class discussions; (3) gives indication of some knowledge and insights; (4) almost never responds constructively to the contribution of others.
- (D) Poor Participation: (1) never or almost never initiates class discussions; (2) never or almost never contributes to class discussions; (3) is late for, does not attend, or is not prepared for 3 or more classes; (4) actively inhibits or impedes the course of discussion; (5) exhibits defensive behavior such as aggression or withdrawal rather than being thoughtful and considerate of others' ideas.
- (F) Failing Participation: (1) never or almost never initiates class discussions; (2) never or almost never contributes to class discussions; (3) is late for, does not attend, or is not prepared for 6 or more classes; (4) actively inhibits or impedes the course of discussion; (5) exhibits defensive behavior such as aggression or withdrawal rather than being thoughtful and considerate of others' ideas.

CLASS SCHEDULE
TENTATIVE COURSE SCHEDULE
for Prof. Eldon Li's BUS6180 Class (3 credit hours).

DATE TIME	TOPIC	READINGS / CASES ASSIGNED
2020/10/17 9:10-12:00 10:30 break	Introduction Knowing the past to predict the future (see video) (1) IT & business organizations	MIT-ch.1, 5, 6 IS7- 6 Article: "IT doesn't matter" Video: "The machine that changed the world"
2020/10/17 12:00-13:10	Lunch break	
2020/10/17 13:10-14:20 14:30-15:30	(2) Managing business systems	MIT-ch.5, 6 Case Study (2) I-6 : ERP migration
2020/10/17 15:40-16:50 17:00-18:00		
2020/10/18 9:10-12:00 10:30 break	GL-1: Telecom Service and its business application cases (Dr. Leo Fang, Air P&B Co., Ltd.)	MIT-ch.3 / IS7-ch. 16
2020/10/18 12:00-13:10	Lunch break	
2020/10/18 13:10-14:20 14:30-15:30	(3) Managing data resources	MIT-ch.4 IS7- 5 Case Study (4) II-4 : government tax revenues
2020/10/18 15:40-16:50 17:00-18:00		
2020/10/23 18:10-21:00 19:30 break	GL-2: Blockchain Security and its business application cases (Dr. Michael Shaw, MIS Dept., National Chengchi University)	MIT-ch.14 / IS7-ch. 11 , 17
2020/10/23 21:10-22:00	Review and discussion	Case Study (1) I-4 : mobile clinics
2020/10/24 9:10-12:00 10:30 break	GL-3: <i>Data Analytic for business strategy with application cases</i> (Dr. Chandler Chu, Dept. Bus. Admin., Chung Yuan Christian University)	MIT-ch.1, 4, 12 / IS7-ch. 2 , 15
2020/10/24 12:00-13:10	Lunch break	
2020/10/24 13:10-14:20 14:30-15:30	GL-4: <i>Big Data Analytic and its Fintech and business application cases</i> (Dr. Shih-Wei Liao, Dept. CSIE, National Taiwan University)	MIT-ch.3, 7 / IS7-ch. 7 , 14 , 15

2020/10/24 15:40-16:50 17:00-18:00	(4) Managing network resources	MIT-ch.3 / IS7-ch. 9 , 10 , 11 Article: “The world is flat” Case Study (5) II-6 : social media
2020/10/25 9:10-12:00 10:30 break	(5) Managing software projects	MIT-ch.9 – 12 / IS7-ch. 13 Case Study (3) II-3 : business intelligence
2020/10/25 12:00-13:10	Lunch break	
2020/10/25 13:10-14:20 14:30-15:30	Article Report presentations & discussion	Presentations 1-9
2020/10/25 15:40-16:50 17:00-18:00	Article Report presentations & discussion	Presentation 10-17

***** NOTE: The final report and the other one-page reports or summaries should be turned in at the end of classes. If you cannot do so, you may turn them in together as a package before 5:00pm on 10/31. Late submission will not be accepted.**