Eastern Connecticut State University
SCHOOL OF EDUCATION AND PROFESSIONAL STUDIES
DEPARTMENT OF BUSINESS ADMINISTRATION
Systems Analysis and Design (BIS 370) 3.0 CREDITS
Semester Summer, June 2009, UG 50136, section E25
An Online course, using WebCT, 06.01.2009-07.09.2009

Lecturer: , Dr D Petkov, web site: http://nutmeg.easternct.edu/~petkovd/
Please note that the communication in this online course will take place through Blackboard email only please. By exception you can send an email to petkovd@easternct.edu if there is a technical problem with Blackboard (see in the Blackboard web site for the course in Subject resources instructions on tuning your computer and downloading plugins for Blackboard webct). All submissions of assignments/test have to be via the Blackboard system please.

This is an online course where the student studies the material on their own using the available resources in the WebCT site for the course at their own pace however submitting the prescribed assignments, lab work and projects within the prescribed deadlines.

The only synchronized activity that must be undertaken at the same time by ALL students without exception are the tests and the exam. All tests and the exam will take place on Tuesdays according to the schedule below in this syllabus starting exactly at 5 pm till 6.00 pm. Eastern US time. The time was chosen in a way not to interfere with standard office hours and most of the summer face to face courses at ECSU. If a student cannot be available for those tests for any reason then the student must make arrangements to change work or other obligations and be available as no changes are possible to the time and dates of the tests please. If a student is unable to write a test then she/he gets 0% for the corresponding test unless the instructor receives a scanned copy of a doctor's note declaring that the student was unfit to write the test. In such a situation the student will get for that test a grade based on the average grades of the other prior tests.

A student may miss for medical reasons at most one test in order to get a grade based on the average test grade based on prior tests but if the student has a valid doctor's note and misses more than one test, then the student will have to write a separate extra test on September 9th 2009 at 3 pm in Webb Hall, 446. If a student misses the final exam or does not submit the project on time, the student gets an F grade unless he or she submits a doctor's note by July 9th 2009 scanned and emailed to the instructor via webct email as attachment please. In such a case the student will get an Incomplete and then the final exam can be written alternatively in a face to face session at ECSU, Webb Hall, 446 at 3 pm on Sept 9th. Wednesday.

Student consultations: only via the webct email (students can expect an answer within 24 hours or earlier from the time of sending an email during one of the following days June 1st-June 4th, June 7th-June 11th; June 14- June 18th, June 21st-

June 25th, June 28th-July 2nd, July 5th-July 9th . During those days that are not listed I may not be able to respond to your messages till the next period announced here. The students are expected to check the course web site at least three times a week for instructions related to the course – after lunch on Tuesday, Thursday and Sunday. An email sent by noon on a given day from those listed above may be replied within the same day while an email sent in the afternoon or in the evening may be replied to on the next day.

Instant messaging chat sessions will be held in the Blackboard course Common chatroom for consultations which each student may wish to join (even just for watching what others are asking sometimes) from 6**.00 pm till 6.30 pm** Eastern US time on every **Sunday starting May 31st**. **and every Tuesday from 6.00 pm till 6.30 pm**. These can be used for synchronous communication with your instructor. Please note **I cannot respond to chat at other times** but you can communicate via webct email. I am available also **via Skype as a Skype user name Doncho.I.Petkov also on Mondays from 4.00 pm till 5.00 pm** Eastern US time if you want to call me for free on Skype from your Skype account (download Skype from www.skype.com) please in case you want to discuss a question that cannot be resolved via the regular chat sessions or email.

All tests and exams will be on Tuesdays only starting for everyone at 5 pm. All tests have to be taken at the same time by everyone in the class hence make work and other arrangements to be available at that time please.

Deadlines are declared in the schedule below and in the links for the corresponding elements in webct, by 11 pm on the particular day. It is very important that you stick to them. You can submit without penalty within 3 days from the deadline which usually captures all cases of short trips or short illness. If a submission is made between 4 and 7 days after the deadline for whatever reason, the penalty will be 20% of the corresponding grade. If a submission is made after 7 days past a deadline but no later than the evening of July 4th 2008, then the penalty will be 30%.

Please note that **July 10th 2009 is the very last possible submission date** as all the grades need to be finalized by that night, having in mind the above rules and the weights for each grade defined in the syllabus.

How to submit assignments or the project
For an assignment or a project you must submit 1 (ONE) only MS Word file that includes the complete documentation for it, including any drawings, tables etc.

Any drawings must be created in MS Visio (you must obtain a 30 day copy of it downloadable from the Microsoft web site or you may get a copy of the CD for Visio from the participation of our department in MS Academic Alliance, for which you will receive email with instructions through a student assistant in the departmental office by May 20th, however the 30 day version directly from Microsoft is an easier option). Please note that **you must not submit any separate files with drawings in Visio format** – instead any drawing must be pasted in the respective MS Word document with answers

for the particular assignment or project. This is a very important rule as an assignment will not be considered if any drawings are not inserted (pasted) in the Word file.

You do not need MS Project software as we cover only the principles of project management in chapter 2 while the BIS program has a separate subject BIS442 on IT Project management when you will need that project. You will be drawing Gantt charts in this course by using either MS Excel as its rows and columns allow to express well activities and their durations or any other package that allows you to draw them.

Course Catalogue Description BIS370:
Prerequisites: BIS361 or equivalent
Provides basic techniques for systems design and development, focusing on the links between BIS systems and their users. Explores the roles of systems analysts and project managers, and the modeling and design tasks that they face. Includes implementation of application packages and enterprise resource planning.

Course learning objectives: After the completion of the course you will be able to:

1. Develop an understanding about the major concepts applicable to systems analysis and design.
2. Understand and apply the work system method to analysis of business problems.
3. Identify the types of systems models that are relevant for each phase of systems analysis and design and focus on Object Oriented Models.
4. Understand management issues in analysis and design.
5. Apply software packages for systems modeling and project management.
6. Develop ability to conduct a team analysis and design project.

Personal development student goals: The above goals will be pursued through the parallel development of analytic and information search skills, communication skills, development of self discipline and ability to cope with change and work under pressure individually and in small teams.

Methods and instructional materials employed: The course objectives will be pursued through class discussions, small group work on a project, work with the textbook (bring it to class please), through homeworks, library and Internet search.

Required textbooks: Available through the campus bookstore in both cases:

1. J Valacich, J George,J Hoffer, Essentials of Systems Analysis and Design, Third Ed, Prentice Hall 2006 . Students may use also the second edition of the book as the content is very similar but the numbering of pages and tasks is not the same – hence students are responsible to find out the correspondence between the numbering of pages and tasks in the individual chapters in the second edition if they use that one by comparing it with another book in 3rd ed. as my announcements are associated to the third edition and the student must answer exactly those please.

Note that in Unit 6 we will use instead of the corresponding chapter 5 in Valacich a pdf file on chapters 4and5 by Stumpf on Object Oriented Analysis and Design which is available in the Subject resources as well and in the library electronic repository for this subject. We will be using also materials by S Alter on the work system method (available from Subject resources in Blackboard).

Additional materials that are relevant for particular topics will be recommended in class additionally. You have to prepare in advance for every week, following the schedule below.

What to do when I see in the Unit Scope and Outcomes file a reference to the book by S Alter

Note that the scope and outcomes documents in each unit refer to a second book by S Alter (The work System Method, 2006) which I am not using with you this time as I have replaced it by three articles by S Alter that are made available in Subject resources in the Blackboard site for this course. Hence each time you see in those Unit scope and instructions files a text referring the book by Alter you need to read the articles by Alter in Subject resources please.

The book web site on Essentials of Systems Analysis and Design is available at the following link:

http://wps.prenhall.com/bp_valacich_esad_3

You can find chapter objectives and presentations there. Use them for self training and revision of the material..

More papers on the Work Systems Method can be found at
http://www.stevenalter.com/newsletter.htm

You will be responsible for various reading assignments throughout the course that will enhance your learning experience. They will be posted on the Course Unit in which they are assigned .

Self training in MS Office and MS Visio

You are strongly encouraged to self- assess your computer knowledge before youy start this course and throughout your BIS studies by using the facilities provided at the MS web site: http://assessment.learning.microsoft.com/test/home.asp. It contains also information about certification opportrunities as well.

You will find many other useful training courses on various computer topics by selecting a topic (like Excel) after exploring the middle part of the following site :
http://office.microsoft.com/en-us/training/default.aspx

After you download from the Microsoft web site the free 30 day copy of Visio that you need, you will find particularly useful the lessons on MS Visio - the drawing software that is used in this course for the various graphical technuiques by clicking at:

http://office.microsoft.com/en-us/training/CR101109221033.aspx

Requirements for completion of the course: To successfully complete this course the student must pass the examinations and complete the term project and assignments. Grading is as follows:

Group Term project	30%
Three tests 4,6 and 10% respectively each	20%
6 Individual homeworks 4% each	24%
Class/online participation incl answers to threaded discussions	6%
Final exam	20%

You will be getting your project description in the form of a detailed case study describing the results of the requirements determination phase of a project. You will find instructions on the deliverables from the project in the are describing your projects in the webct site for this course.

Homeworks are to be submitted only via webct using the corresponding links. The details of the homeworks deadlines and the term project are found below. Homeworks should be submitted by the WebCT site deadlines applying the policies for deadlines.

The **grading scale** will be 93-100 =A; 90-92=A-; 87-89=B+; 83-86=B; 80-82=B-; 77-79=C+; 72-76=C; 70-72=C-; 67-69=D+; 63-66=D; 60-62=D-, 0-59=F.

COURSE SCHEDULE

Schedule of sessions: Sometimes there will be lectures, sometimes video presentations or small group work. The student is supposed to prepare for each session in advance covering on their own the material. The sessions in class will be in the form of a review of important highlights of the particular chapter, quizzes and exercises. Please bring your text books always to class.

See below please:

Unit	Lecture Topic	Reading Assign	Projects/Assignments Announcements
One, starting 06.01	Introduction To The Course. Ch 1 Valacich Alter, the paper on the WSM	Ch 1 Valacich Alter the paper on WSM in Subject resources	Project assignment and team formation- teams of 2 students to be sent to you in a Blackboard email.
Two 06.04	Ch 2 . Valacich Alter's paper s on WSM including the 2003 paper and the 2008 paper where you can see an example of a work system snapshot	Ch 2 . Valacich Alter's papers on WSM	Hk1 due 06.06.
Three 06.08	Ch 3 . Valacich	Ch 3 . Valacich	Test 1 is on June 9th at 5 pm
Four 06.11	Revision Ch 4, Valacich	Revision of all previous material Ch 4, Valacich	H2 is due 06.13 Project assessment by each team- any questions to be asked in the chat sessions or by webct email.

Five 06.15 and 06.19	Ch 3-4 by Stumpf on Event and use case modeling,	Ch 3-4 by Stumpf on Event and use case modeling,	Test 2 is on June 16 Project work by each team H3 is due June 20th
Six 06.22	*Revision* Ch 3-4 by Stumpf Ch 6 Valacich	Ch 3-4 by Stumpf on Event and use case modeling, revision, Ch 6 Valacich	Student teams are very strongly encouraged to ask for feedback on their fully completed projects including project outcomes 1- 10 by by submitting their completed report document via webct email attachments (only one student from a team) **by June 23rd** at the very latest as after that it is too late to ask for advice on the project please. I will give you feedback by email within 4 days so that you can revise your project before officially submitting them later.
Seven 06.25	Ch 6 Valacich (cont.) Ch 7 Valacich	Ch 6 Valacich (cont.) Ch 7 Valacich	Hk4 is due June 27
Eight 06.29	Ch 8 Valacich	Ch 8 Valacich	Test 3 is on June 30th
Nine 07.01	Ch 8 Valacich cont Ch 10 Valacich	Ch 8 Valacich cont Ch 10 Valacich	Hk5 is due July 3rd The Project is due July 5th- (reflect the feedback from your advisor and add also outcomes 11-14 to the first version you submitted earlier by email) submission of both Word file and PPT presentation file in the

			respective link in Blackboard for the project please.
Ten 07.05	Ch 10 Valacich Revision project evaluation	Ch 10 Valacich Revision Project evaluation	The final exam is on July 7th at 5 pm Hk6 is due July 8th 11 pm

Accommodation of students with disabilities:
If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Office of AccessAbility Services at 465-5573. To avoid any delay in the receipt of accommodations, you should contact the Office of AccessAbility Services as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Office of AccessAbility Services. Your cooperation is appreciated.

WEB RESOURCES FOR THE STUDENT IN SAD – the site of the first book:
http://wps.prenhall.com/bp_valacich_esad_3 Use it for self quizzes and other materials. the second book does not have a separate web site.

Academic Honesty and Writing Policy Statement

Among the primary purposes of a university education is the development of abilities and attitudes necessary to engage thoughtfully and ethically with the ideas of others--so that you make fully, accurately, and appropriately clear in your writing (or speaking) where and how those others have influenced your thinking and your conclusions. These abilities and attitudes are generally part of the larger concept of "academic honesty."

Academic honesty involves taking responsibility for your own education, completing all work required of you on your own, and contributing thoughtfully and fully to any group work assigned or sanctioned by your instructors. In more straightforward terms, academic honesty means not cheating on tests and not plagiarizing.

BIS370 Project deliverables

The project documentation is in the form of ONE MS Word 2003 file that needs to have all the components listed. You must submit separately also any spreadsheet models as Excel 2003 files but those must be also pasted in the Word document:

1. Define the mission of the business, the mission of this information system.
2. Provide for the system you are investigating (do not explain theory but apply it)

the following types of WSM analysis: work system snapshot; identification of the system and the problem; analyze the work system and identify possibilities for improvement, recommend changes to the work system and justify those changes. You need to demonstrate that you have used the work system method at least at levels 1 and 2 following Alter. This analysis should focus on the work system and only then you will be prepared to discuss the relevant new IT system.
3. Describe the IT project scope. Define possible alternative IT solutions.
4. Conduct detailed technical, organizational and economic feasibility of the project. If necessary provide some starting relevant assumptions. Use specific numbers in those assumptions and conduct the economic feasibility with them. Provide relevant analysis of every type of feasibility (not general theorizing on what that means but conduct the feasibility analysis!)
5. Divide the project into manageable tasks and subsystems. Define their boundaries and interfaces.
6. Create a preliminary project schedule in the form of a Gantt chart.
7. Identify and assess realistically the various types of risks with this project.
8. Develop statement of work for this project.
9. Conduct event analysis and document it. Produce the relevant event table.
10. Draw all use case diagrams for this project and prepare use case descriptions at summary (kite) level using the template in Stumpf ch 4.
11. Produce the entity relationship model without any not-simplified M;N relationships, showing all data attributes for every entity, min and max cardinalities within the specified scope.
12. Design the necessary input and outputs for the system and all elements of the human interface. List all inputs and all outputs. Provide the dialogue diagram for the system. Provide detailed design for at least 3 inputs (at least one document and 2 screens) and 3 outputs (at least one printed and two screen reports).
13. Suggest and justify the appropriate design strategy.
14. Define a plan for testing, including as examples at least 3 illustrative test cases.
15. Produce a brief plan for implementation and installation of the system.

YOUR PROJECT TOPIC DESCRIPTION

Your project is to design a computer based information system for a Car Hire Company . The description of the requirements that are usually derived through the requirements analysis methods (reflected in chapters 2-4 of the Valacich book) is summarized on pages 92-95 of the electronic file "Stumpf ch3-4" that is available in the Subject resources area – the right most icon in the opening screen of the coursed webct site.

If necessary please add any assumptions on needed data (like those that are needed for some of the feasibility analysis) then these need to be specified in your project document. Your documentation needs to contain the deliverables listed here.

I have included a good sample project document from past years: on a system for a publishing company. It gives you a good idea about what is an outstanding quality

and depth in working on the project.
In essence you should be driven by the above list of the required Project deliverables.

It will be useful for you to study the solutions of various problems provided in the units (see the files labeled Notes…in each unit) for training purposes before you work on your project.