Fall 2013 - Business Systems Analysis and Design
CISM 4310 Section 01 (crn: # 81064)
Monday & Wednesday 1230 - 1350
Adamson hall 217
(Syllabus revision: # 082013)

FACULTY DATA:
Dr. Douglas Turner, Professor
Phone: 678.839.6467

OFFICE HOURS:
- by appointment

CRITICAL INFORMATION:
- This syllabus is subject to change by the Professor. To communicate to the class as a whole
  the Professor will post changes on the “Daily Notes” at
  http://www.westga.edu/~dturner/fall13.htm. View the website for daily updates about the
  course. The contents of the daily notes are technically part of the syllabus contract and can
  alter the terms of this syllabus.
- The due dates are posted below in the FALL 2013 SCHEDULE.
- You have the option to submit your deliverables early, but remember that the item first
  submitted is the one graded.
- Deliverables will be graded against the posted criteria. If there is ANY confusion or something
  not clear the student has the obligation to ask the Professor.

COURSE LEARNING OBJECTIVES:
- The following course learning objectives are specific to the BBA Degree in Management
  Information System Learning Goals, they are:
  1. Have acquired at least limited proficiency in a programming language and several software
     packages, beyond spreadsheets and word processing (BBA 3, MIS 1).
  2. Understand the basic principles and concepts of business systems analysis, systems design,
     and data communications (BBA 3, MIS 1).
  3. Apply the above knowledge analogously to other areas of human endeavor (BBA 6).
  4. Critically analyze complex information systems, issues, and problem (BBA 6).

COURSE TIME EXPECTATIONS:
- Beyond the lecture, discussions, development and review time occurring within the scheduled
  course periods, each student should plan to spend a minimum of at least two additional hours
  each day to properly complete this course.
- The additional required time is often represented by business site visits, team meeting, and
  individual curriculum study.
STUDENT RIGHTS AND RESPONSIBILITIES:
- Please carefully review the information at the following link:
  http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf
- The document at this link contains important information pertaining to your rights and
  responsibilities in this class. Because these statements are updated as federal, state,
  university, and accreditation standards change, you should review the information each
  semester.

CREDIT HOUR POLICY 3 credit hours):
- For approximately fifteen weeks, students in this class will generally spend 150 minutes with
direct faculty instruction (either face-to-face or online) and work about 360 minutes outside of
the classroom each week. This out-of-classroom work may include, but not limited to, reading,
assignments, projects, group work, research, and test preparation.

COMMUNICATIONS:
- All e-mails are to be sent to dtturner@westga.edu.
- Your UWG e-mail account is the official individual communication method at UWG.
- Only assigned University of West Georgia e-mails accounts will receive an e-mail response.
- Everyone please check and be sure that you are not over quota in your WESTGA e-mail
account. I frequently have messages that bounce back due to this problem. I will not make
multiple attempts to contact you via e-mail.
- The only website utilized in this course can be found at
- No other website or software like Ready2Learn is utilized.
- Even if website is listed as active by the University, no submissions or e-mails are answered
  within environments such as CourseDen, WebCT, or Ready2Learn.

PREREQUISITES:
- CISM 2335 and CISM 3330.
- It is expected that all students will be familiar with, and have the necessary skills to prepare
materials in Excel, Access, and PowerPoint.
- There is no assigned textbook for this course.

REQUIRED SUPPLIES:
- (One per team) blank CD and case (this item will not be returned).
- (One per team) 1” Cardinal Slant-D white binder #26300CB.
- As an example see http://www.staples.com/1-inch-Cardinal-XtraLife-ClearVue-Binder-with-
  Slant-D-Rings-White/product_404831 (this item will not be returned).
- (One per team) Windows 95 or better based software and hardware, and CD generation and
  label capability.
  Suggested below but not required:
- (One per team) A laser pointer for the team is an extremely useful tool during presentations.
- (One per team) A reference copy of “Systems Analysis and Design”, Gibson, Michael, and
  Hughes, Cary (ISBN # 0-87709-247-8). Copies can be found on the Web for as little as $5.00.
- (One per team) Technology Forecast: 2002-2004, Volume 1 (or any other version).
DEMEANOR:
- The highest degree of professionalism is required when interacting with end users in public.
- **Proper business attire is always required when meeting with end users.**
- Choose your questions carefully for the end users.
- Never promise change to end users as this is only a study.

METHOD OF INSTRUCTION:
- There are both individual and team graded components of this course.
- The engagement of this course has multiple components; presenting five PRS team demonstrations (explained below), a team developed notebook relevant to DFDs (not returned), an individual DFD analysis, two individual closed book exams, the development of a team project CD, and a final presentation of the project.
- The three primary causes of failure in this course are the lack of expectation management with end users, failure to follow project guidelines, and team time management.
- Note that the project methodology presented by the Professor will be used to grade project components and may differ slightly with various authors that may be referenced.
- There will be days during the term that teams will meet as breakout teams outside of the physical classroom (students are held accountable for attendance).
- Grades are impacted by the lack of the quality of detail and attention to stated requirements.

DELEVERABLE SUBMISSION TYPES:
- **ECD** - Electronic media deliverables are word documents (format.doc), power point slides (.ppt), and excel files (.xls) retained by the team and then submitted on the project CD.
- **EML** - Electronic media deliverables are word documents (format.doc), power point slides (.ppt), and excel files (.xls) that are submitted as e-mail attachments to dturner@westga.edu.
- **PRS** – Electronic media deliverables presented in front of the class by teams elected members.
- **PIC** – Printed paper deliverables include printed word documents, printed power point slides, and printed excel files ready to turn to the Professor at the beginning of class or when due as stated in the syllabus. A cover sheet is required for all PIC submissions.

INDIVIDUAL DELIVERABLES:
1) **PIC** and **ECD** individual student DFD leg with the appropriate atomic level DFDs and parent linkage DFDs back to the system level DFD. To include descriptions and MLOG contributions.
2) Exam one (lower value) - DFD modeling rules as discussed in class Scantron required. Closed book and no notes.
3) Exam two (higher value) – Quality methodologies to cover the reading list and lecture in quality management. Expect topic based reading assignments to be assigned. Scantron required. Closed book and no notes.
4) Each individual student is accountable for the development of the five demonstrations.
5) Each individual student is required to participate in the development of the final project presentation and CD.
6) **ECD** Each student will participate in the review process of the final project presentations and complete a review form for each.
ATTENDANCE (Individual deliverable 7):
- Attendance is taken at the discretion of the Professor.
- Attendance is expected every day regardless of the assignment, whether it is in class, in the break out rooms, or at the work site with the end users.
- At the end of the term all days missed divided by the number of days when attendance is taken determines the percentage of attendance credit.
- There is no day of grace from class assignments or obligations.
- Failure to participate or engage in class activities will count as NOT ATTENDING class.
- Loss of attendance credit and the loss of scheduled activity points can occur concurrently when you fail to attend class.
- You are considered missing and attendance credit is lost IF YOU ARE LATE TO CLASS, or LEAVE BEFORE BEING DISMISSED.

TEAM EFFORTS:
- As teams are self selected there will be no team reassignments.
- Preferably teams will consist of a maximum of four members.
- Chose you team carefully as they are with you for the entire term!!!
- This is a very time consuming endeavor resulting in the iterative development of a substantial project.
- Students can expect to encounter a variety of interesting challenges in learning the concepts of system development and in applying these concepts in real-world situations.
- Learning to effectively use a systems modeling tool will be a part of this process.

TEAM DELIVERABLES:
- (1) Each team will prepare and present five (5) team DFD demonstrations to the class.
- (2) Each team to prepare and submit a notebook of the project including the individual student DFD leg decomposition.
- (3) Each team will prepare a team CD.
- (4) Each team will prepare and present a final project presentation to the class.

TEAM DELIVERABLES (details):
1) PRS (Exception note: D1 below is ECD, PIC, and PRS) Each team will prepare and present five (5) team DFD demonstrations to the class.
- As a team present relevant material and get full credit, present nothing and receive nothing, do not attend or participate and receive nothing.
- Coordinate where your problems are and use those for the class discussion.
- The more attention you pay to the other projects, the more apparent the problems of your own project will become.
- Expect to answer questions and represent in the next demonstration if errors are presented.
  Team DFD demonstration_1 – Team project proposal.
  - The project proposal is ECD, PIC, and PRS.
  - Each team will offer a single point of contact (name, e-mail, and telephone number) for the Professor to use as an information clearinghouse to the team.
  - Each team will submit and present the proposal to the class.
  - There must be at least enough major level processes for one per team member (those processes at the context level).
  - Limited electronic delivery (.ppt) may be used.
- The project proposal submission will include:
  - The Organization’s name, Organization’s contact name, telephone number and address (The organization should have minimum of ten members).
  - Listing of team members, each member’s e-mail address, and the name and telephone number of the contact member.
  - Description of team organizational structure chart of associated duties.
  - Identify which DFD leg each student wishes to be assigned.
  - Brief description of objectives and time line for the DFD project.

**History of the firm (include the description of the business).**

**Team DFD demonstration_2** - Context and Systems level DFDs.

**Team DFD demonstration_3** - All entity dictionary descriptions, two examples of data store content with M-LOGs.

**Team DFD demonstration_4** – Review of a completed single “leg” DFDs (with process names). This is the last opportunity to engage in questions concerning methodology and project requirements. If you have questions ask now.

**Team DFD demonstration_5** – Review of the complete drill down of all DFDs (Note: these demonstrations will not cover the entire project requirements, see the Project Notes for actual details). This is the last opportunity to engage in questions concerning the project CD layout. If you have questions ask now.

### 2) PIC

Each team to prepare and submit a notebook containing the individual student DFD decompositions. Each student submission should be behind individual tabs. Include a cover page on notebook.

### 3) ECD

Each team will prepare and submit a CD (See PROJECT CD section below).
- Prepare a thorough history and business description of the firm.
- Define and thoroughly describe the project application.
- Define all users and expected usage of data supplied by your application.
- Define existing logical system, user requirements, and logical proposed system using DFD specifications and analysis/design dictionary entries.

### 4) ECD and PRS

Each team will present the final project to the class.
- The (ppt.) presentation will have a run time of between 9.0 to 10.0 minutes. PRACTICE!
- You will be scheduled a 15 minute block of time with an additional two minute set up.
  - Content considerations:
    - Title screen
    - Discussion of firm and current applications
      - Who owns it, and why the firm exist.
      - What is the nature of that specific business market (i.e; competitors).
      - A description of the current hardware/processes.
      - A discussion of the problems observed with the current system.
    - Explanation of the components of a DFD.
    - Explanation of entities used.
    - Decomposition of specific dfd legs as defined by the team.
    - Discussion of suggested process changes.

- This is a research presentation, place a strong emphasis on TECHNICAL information, and do not spend a great deal of time stating the obvious or common knowledge issues.
- Do not just read the slides!
FORMAT OF DOCUMENTS:
- The first submission received will be graded against the requirements, turn in what you wish to
  be graded the first time, there are no “corrected copies” or “do-overs”!
- Variances found between ECD, EML, and PIC deliverables will result in a lower score or grade.
- As this is a business course all submissions will be of business content and quality. There is
  no “I” when writing in this environment.
- Substantial point deduction (including 0 points for submission) for format, grammar, and
  punctuation errors.

TROUBLE SHOOTING:
- Each team is expected to maintain adequate control of back up programs and data.
- Loss of a system or data is not an acceptable response to project requirements and consultation reviews.
- Each team must organize and manage itself to effectively meet the requirements of the
  Professor and the user for whom you will be developing a system.
- It is strongly recommended that members of each team be assigned the task of contact point, archive librarian, hardware specialist, software specialist, quality assurance proof reader (text), diagram flow consistency proof reader, treasurer, prototype coordinator, and presenter.
- You may discover other major tasks that should be assigned as well.
- Consider assigning a primary and secondary role to each team member.
- However, all team members should be knowledgeable in all aspects of the project.

OTHER PROJECT DETAILS:
- Never, never pass up an opportunity to meet with you team.
- The final project should address functional problems in the original organizational design.
- Your project should meet the requirements of the end user.
- The project should be creative and explained thoroughly and clearly.
- MAINTAIN BACK UP COPIES WITHIN YOUR TEAM. DISKS DO FAIL!
- Consider the use of a father, grandfather, great grandfather method of data backup.
- Consider keeping a running list of data flow names to prevent duplication.
- Utilize the same printing format required for the word processing of the project.
- Do not expect approval if the team has a minimal grasp of the organization to be studied or is
  not adequately prepared to discuss organizational particulars.
- Quality issues (graphics, text, grammar, spelling, etc.) can severely damage a project grade.
EVALUATION:
-The total grade is based on a 10 point scale.

Individually generated grades (60 percent)
1) Individual DFD notebook contribution 34.0 %
2) DFD exam 06.0 %
3) Quality exam 15.0 %
4) Attendance 05.0 %

Team generated grades (40 percent)
1) Team DFD demonstrations_1 - 5 (2.0 points each) 10.0 %*
2) Overall notebook detail quality 04.0 %*
3) Project CD (with all components) 13.0 %*
4) Project presentation to the class 13.0 %*
* Properly submitted peer evaluations will alter 50% of the items T1, T2, T3, and T4.

TEAM PEER EVALUATIONS:
- Peer evaluations incorrectly submitted or late are not valid.
- Peer evaluations are EML (see schedule).
- The team peer evaluation template is posted as “team_eval_template.xls”.
- Use values ranges from 0% and 100%, in increments of five points, without self assessment.
- Peer evaluations are confidential; no feedback will be given except in the form of a single individual student grade.
- Peer evaluations will be collected in class on the published date.
- Only the peer evaluation from this syllabus is acceptable.

COURSE POLICIES:
- While assignments may be returned to the student(s) for correction and evaluation, all material submitted as part of the course requirements become the property of the Professor.
- As this course is designed to be centered on teamwork incomplete grades are not given.
- The Professor retains the right to subjectively evaluate an individual student's grade upward in appropriate cases based upon observed performance.
- Within class all computer screens and cell phones are to remain off unless told otherwise.
- Note from the outset that there are components of this course that are far less structured than what are normally presented in most courses!
- Individual initiative and responsibility is required to succeed in this course.
- Plan you time carefully, acceptances of late work would require extraordinary circumstances and are subject to the Professors approval.
- A legitimate and verifiable physician or court related written excuse is required to prevent attendance point loss.
- Ensure that you have a file backup method for the worst case scenario.
PENALTIES FOR BREACH OF ACADEMIC INTEGRITY:
- Each incidence of academic dishonesty is subject to review and consideration by the instructor, and is subject to a range of penalties including but not limited to failing the assignment, failing the course, and referral to Office of the Vice President for Academic Affairs.
- Signing the attendance sheet for another person, making of any type of copy of, or failing to return a test are all deemed to be violations of the academic integrity.
- Students are responsible for understanding plagiarism. In general, plagiarism is defined as the use of intellectual material produced by another person without acknowledging its source.
- The following are some examples of what is considered plagiarism:
  * Copying of passages from works of others into an assignment, paper, discussion board posting, without acknowledgment.
  * Cutting/pasting information available on the web or online databases.
  * Using the views, opinions, or insights of another without acknowledgment.
  * Paraphrasing another person's characteristic or original phraseology, metaphor, or other literary device without acknowledgment.
FALL 2013 SCHEDULE:
- Changes to this schedule will be posted in the “Daily Notes”.

<table>
<thead>
<tr>
<th>DAY</th>
<th>DATE</th>
<th>MATERIAL COVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MON</td>
<td>AUG 26</td>
<td>Introduction, discussion, and team assignments.</td>
</tr>
<tr>
<td>WED</td>
<td>AUG 28</td>
<td>DFD examples.</td>
</tr>
<tr>
<td>MON</td>
<td>SEP 02</td>
<td>NO CLASS.</td>
</tr>
<tr>
<td>WED</td>
<td>SEP 04</td>
<td>DFD examples.</td>
</tr>
<tr>
<td>MON</td>
<td>SEP 09</td>
<td>DFD discussions, problem identification.</td>
</tr>
<tr>
<td>WED</td>
<td>SEP 11</td>
<td>Introduction to Quality Methodologies.</td>
</tr>
<tr>
<td>MON</td>
<td>SEP 16</td>
<td>DFD.</td>
</tr>
<tr>
<td>WED</td>
<td>SEP 18</td>
<td>Demonstration_1 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>SEP 23</td>
<td>Demonstration_1 discussion by teams.</td>
</tr>
<tr>
<td>WED</td>
<td>SEP 25</td>
<td>Demonstration_1 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>SEP 30</td>
<td>Demonstration_2 discussion by teams.</td>
</tr>
<tr>
<td>WED</td>
<td>OCT 02</td>
<td>Demonstration_2 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>OCT 07</td>
<td>Project work outside of class.</td>
</tr>
<tr>
<td>WED</td>
<td>OCT 09</td>
<td>Project work outside of class.</td>
</tr>
<tr>
<td>MON</td>
<td>OCT 14</td>
<td>Demonstration_3 discussion by teams.</td>
</tr>
<tr>
<td>WED</td>
<td>OCT 16</td>
<td>Demonstration_3 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>OCT 21</td>
<td>Demonstration_3 discussion by teams.</td>
</tr>
<tr>
<td>WED</td>
<td>OCT 23</td>
<td>DFD exam.</td>
</tr>
<tr>
<td>MON</td>
<td>OCT 28</td>
<td>Project work inside of class.</td>
</tr>
<tr>
<td>WED</td>
<td>OCT 30</td>
<td>Project work inside of class.</td>
</tr>
<tr>
<td>MON</td>
<td>NOV 04</td>
<td>Demonstration_4 discussion by teams.</td>
</tr>
<tr>
<td>WED</td>
<td>NOV 06</td>
<td>Demonstration_4 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>NOV 11</td>
<td>Project work outside of class.</td>
</tr>
<tr>
<td>WED</td>
<td>NOV 13</td>
<td>Demonstration_5 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>NOV 18</td>
<td>Demonstration_5 discussion by teams.</td>
</tr>
<tr>
<td>WED</td>
<td>NOV 20</td>
<td>Demonstration_5 discussion by teams.</td>
</tr>
<tr>
<td>MON</td>
<td>NOV 25</td>
<td>Thanksgiving break.</td>
</tr>
<tr>
<td>WED</td>
<td>NOV 27</td>
<td>Thanksgiving break.</td>
</tr>
<tr>
<td>MON</td>
<td>DEC 02</td>
<td>Presentations (1230-1245, 1247-1302, 1304-1319, 1321-1336, 1338–1353)</td>
</tr>
<tr>
<td>WED</td>
<td>DEC 04</td>
<td>Presentations (1230-1245, 1247-1302, 1304-1319, 1321-1336, 1338–1353)</td>
</tr>
</tbody>
</table>

CD, notebook, emailed team evaluations due at 4:00 pm!

WEDNESDAY DEC 11  Quality methodologies exam
INDIVIDUAL DFD DECOMPOSITIONS:
- Each student in each team will select a Data flow diagram (DFD) “leg” to decompose from the team project.
- Example: Sales and Service XXX00P01; first child XXX0001P00.
- An atomic level process is defined as the lowest state of decomposition of a DFD (none exist on the content and system level).
- Each student is individually responsible to prepare a minimum of **12 atomic level processes** and the associated data (ECD - on CD under DIR:SEC_II, SDIR:<student’s last name>).
- The **sdir: <student’s last name>** will include a word section (file:process.doc) containing all of the associated process descriptions, process identity numbers, and names. Remember that process names are small and exact at the lower levels, while larger in and length and more generalized as they go up the DFD legs.
- The DFD leg will comply with the graphical and data standards utilized at the team level.
- Diagrams to be designed in a consistent manner (size, notation, etc.).
- Processes are best represented by using the format where each process has two numeric values.

PROJECT CD:
- **THIS SUBMISSION WILL REMAIN WITH THE PROFESSOR, AND WILL NOT BE RETURNED.**
- Below are the details of the CD. Each CD contains directories (dir) sub-directories (sdir), and individual files (file: name).
- Remember the first submission is what will be graded against the requirements.
- The project CD will have a printed label. The CD submission will be submitted in a clear CD case (with the label visible).
- The printed label will include the team name, the company of study, semester and year, Dr. Turner CISM 4310, and the names of the team members.

CD file layout for submission

directory: sec_I (team project details)
  file: proposal.doc
  file: history.doc
  file: proposal.ppt (optional)
  file: context.xls (current context and system level DFDs)
  file: entities.doc
  file: mlogs.xls
  file: pres.ppt (team final presentation)
directory: sec_II (complete individual student DFD data)
  sdir:<student’s last name>
    file:ind_dfd.xls
    file:process.doc
**HOW TO GUIDE:**
Your project will **NOT** require SV/MV designations. Below is an example of a \texttt{M\_LOG} composition:

\begin{verbatim}
M\_LOG\_CABINET
  M\_LOG\_BACKPAC

  M\_LOG\_CHECK\_BOOK

M\_LOG\_WALLET

  LOG\_DRIVER\_LIC
    NAME
    SSIN
    DOB
    LIC\_NUMBER
    EXPIRE\_DATE

  LOG\_SHELL\_CREDIT\_CARD
    NAME
    ACCT\_NUMBER
    EXPIRE\_DATE

M\_LOG\_ORGANIZER\_BOOK

  WEBCT\_ACCT\_NUMBER
  WEBCT\_PASSWORD

LOG\_ADDRESS\_BOOK

  NAMES
  HOME\_ADDRESS
  WORK\_ADDRESS
  HOME\_PHONE\_NUMBER
  WORK\_PHONE\_NUMBER
\end{verbatim}
### General Application Rules Chart:

<table>
<thead>
<tr>
<th>NAME</th>
<th>SYMBOL</th>
<th>RULES</th>
<th>LABELS/NRMBER</th>
<th>REQUIRED ENTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>![Process Symbol]</td>
<td>Each process is unique. DFDs decompose on processes.</td>
<td>Unique name (once per project) and number.</td>
<td>Diagram and Description.</td>
</tr>
<tr>
<td>Stored Data</td>
<td>![Stored Data Symbol]</td>
<td>Can be nested or reused. Represent the mass logical data stores (MLOG/LOG).</td>
<td>Unique name (once per project).</td>
<td>Description and MLOG/LOG</td>
</tr>
<tr>
<td>Entity</td>
<td>![Entity Symbol]</td>
<td>Must be reused. Entities represent teams of individuals/function providers.</td>
<td>Unique name (once per project).</td>
<td>Description.</td>
</tr>
<tr>
<td>Data flow</td>
<td>![Data Flow Symbol]</td>
<td>Each data flow is unique. Nested, but not modeled. Each line has two Labels. One way linear relationship are rare!</td>
<td>Unique name (once per project). No label required for linear relationship.</td>
<td>Flow table for ATOMIC PROCESSES</td>
</tr>
</tbody>
</table>
JH0000P01 Payment Services

To the process

1 rec_norm_emp_log_computer
2 rec_cont_emp_log_computer
3 rec_emp_reg_data
4 mgnt_reg_supervise
5 req_norm_emp_pmt
6 req_cont_emp_pmt
7 req_mgmt_pmt
8 validate_credit_Check_pmt
9 send_Pmt_credit_data
10 sub_order_pmt_data
11 rec_tax_data
12 req_reg_cash_data

From the process

1 req_norm_emp_log_computer
2 req_cont_emp_log_computer
3 req_emp_reg_data
4 req_emp_reg_data
5 mgnt_correct_supervise
6 rec_norm_emp_pmt
7 rec_cont_emp_pmt
8 update_mgmt_pmt
9 validate_credit_Check_acct
10 rec_decision_credit_data
11 rev_order_pmt_data
12 rev_tax_data
13 rec_reg_change_cash_data