

# Course Syllabus Fall 2016

### Hybrid

COURSE: CIS 2910 IT Capstone

PROFESSOR: Dr. Colin Archibald (Dr. A.)

Office: West Campus 7-127

E-mail: CArchibald@valenciacollege.edu (Please Use BlackBoard email system)

Phone number: (407) 582-1517 Skype ID: Dr.Colin.Archibald

Google+: <u>DrColinArchibald@gmail.com</u> (Not used for email)

**Student engagement hours:** An announcement in Blackboard will show office hours. They are also posted on my office door West Campus 7-127.

# **Catalog Description:**

This course is designed for IT students who have completed a significant portion of their degree course work. Students will use their knowledge of IT concepts to complete a comprehensive project including a detailed project plan, implementation, documentation, and final presentation.

CRN: 16678 Credit Hours: 3.0

Prerequisite(s) and Co-requisite(s): Department Permission

Meeting places and times: West Campus Room 7-129 Tuesdays 6 pm – 8 pm

### **COURSE OUTCOMES:**

- Utilize basic systems analysis and design techniques including requirements analysis, design, implementation, and documentation.
- Recognize and apply sound project management techniques.
- Utilize project version control as a part of project development.
- Use communications skills to document and present project results.
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### Common themes throughout the course:

- 1. How to make a good Impression
- 2. Empathetic and effective communication
- 3. Communication includes listening
- 4. Teamwork

### **EDUCATIONAL MATERIALS:**

#### **REQUIRED**

Textbook: None

Online materials will be referenced throughout the semester.

### Assignments, Team Project, Peer Evaluations, Project Notebook, Documentation, Presentations:

**1. Technical Writing/Soft skills Assignments** will be individual. Online research, or reading assignments will be included here. This is the **technical writing/Soft Skills** component of the course.

The **team project** is the core of the course. The implementation of the product will require collaborative efforts. The project planning, design, organized implementation, testing, and descriptions of the issues encountered during implementation will all be considered.

2. Peer Evaluation: Each student will submit a peer evaluation spreadsheet near the end of each evaluation cycle. Cycles are 3 weeks long. These are submitted in BlackBoard. A blank Peer Evaluation sheet is found in BlackBoard. Each student's peer evaluation score is determined based on how well they do the evaluation, as well as by the scores awarded by their peers.

(The peer evaluation scores that are issued by the students for their colleagues is not necessarily the score recorded – the final decision on student evaluation is the responsibility of the professor.)

- 3. Project Documents these are 3 distinct things.
  - **3.1 Project Management Notebook:** Each team shall submit a single project notebook that captures all of the relevant aspects of the project. This one is **on Paper** in a 3-ring binder. Design considerations, meeting minutes, status reports, project plans, and correspondence are examples of items to be included. This notebook should be maintained throughout the project as opposed to trying to reconstruct the project at the end of the semester. The notebook will be a record of the project work, and items in the project notebook should be kept in **chronological order**. All team **meetings will have minutes** that describe the discussions, and the team decisions that were made.

#### 3.1.1 Online / Virtual Team Meetings

Each team will meet once per week outside of the class meeting. Minutes / notes from this meeting will be included in the Project Management Notebook. This meeting will be virtual using Google Hangouts. Each team will invite DrA to attend their virtual meeting. I will attend as many of them as possible.

Each team will have one binder, and they will bring it with them to each class.

- **3.2 Project Documentation:** These are electronic documents, presented on a single DVD one per team. This disk is appropriate for passing the entire project to another team of technical experts. The project itself will be on this disk. Documentation will include items such as: the tools used in the creation of the project, the technical specifications for the project, the technical difficulties / pitfalls that may be encountered by the subsequent team. This disk is intended to ensure that the project will not end when the semester is over.
- **3.3 Project Presentation:** The result of the project work as it is presented to the 'client.' This includes an oral presentation to the rest of the class, and a printed document that describes the product. (The product and the project are different.)

- **4. Presentations:** The teams will be asked periodically to present their progress to the rest of the class. These are expected to be planned and organized but informal, technical presentations. All team members will take part in the presentations. The teams that are asked to present will know at least one week in advance. There will be a final presentation by each team during the **final exam** period.
- 5. Reflective Peer Evaluation: Toward the end of the semester, each student will be asked to evaluate each member of the team, including yourself. What were the contributions of the team member? Was that person a pleasure to work with? Did they make a contribution by leading, or by well-defined individual contribution? The most in-depth evaluation will be the self-evaluation. What did you contribute? Did you work effectively with others? What did you do right, and wrong?

#### **ASSESSMENT METHODS AND EVALUATION:**

**Overview:** During this course students will be divided into teams that will implement a project. Part of the course is to manage the project using professional collaboration tools and mechanisms.

The teams will function as a part of a **simulation** as follows: All of the team members have been hired by a company to produce a product. The team will need to gather the requirements, design, implement, and test the product. The product will be presented, put into production, and its success will be analyzed. A separate document describes the project that will be implemented by the teams.

The "simulation" is that there is a company that actually hires the teams.

- DrA is **not** the technical leader the students are the technical leaders.
- DrA is not the project manager; the students' teams will manage their project.
- DrA will play the role of the President of the company in the simulation.
- DrA will also play the role of the instructor, offering guidance, and specifying the 'rules,' deadline, evaluations.

Although the team project is the main thread through the course, there are also individual assignments that address soft skills, and workplace skills.

- Students will evaluate and rank their peers, and themselves.
- Students will evaluate and rank the other team projects.

Peer evaluation score reflects how well you evaluate your peers, and the scores that your peers assign to your efforts.

The final exam in this course is the project presentation. It is MANDATORY. Any student not participating in the final project presentation will receive a grade of F for the course. **December 13, 2016 at 6:00 – 8:30 PM in 7-129.** 

#### **Evaluation:**

1.	Technical Writing Assignments	10%
2.	Peer Evaluations	40%
3.	Team Project	35%
4.	Oral Presentations	10%
5.	Reflective Peer Evaluation Paper	5%

The sum of these will determine a letter grade as follows:

90 – 100	Δ
80 – 89	В
70 – 79	C
60 – 69	
0 – 59	F

#### ATTENDANCE POLICY:

It is expected that students will attend all classes. Missing more than 3 classes will result in being withdrawn from the class.

You will lose 2% of your grade for each missed (or late) class up to 6% points, and then you will be withdrawn on the 4<sup>th</sup> absence for excessive absences.

It is required that students read all email and discussion postings in Blackboard.

It is expected that an average student will require a total of 10 hours of work per week to be successful in this course.

#### LATE SUBMISSIONS

Part of this course is about responsibility in a workplace. Work submitted late will be penalized by 20%. Work more than 1 week late will scored as 0 (ZERO).

#### **NO-SHOW PROCEDURE**

Any student who does not attend class prior to the start of the no-show period will be withdrawn by the instructor as a no-show. This will count as an attempt in the class, and students will be liable for tuition. If your plans have changed and you will not be attending this class, please withdraw yourself through your Atlas account during the drop period for this term.

In-class section: To avoid being withdrawn as a "NO-SHOW" you must attend the first class on Aug 30 or Sept 6, 2016.

<u>WITHDRAWAL</u> Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), a student who withdraws from class before the established deadline for a particular term will receive a grade of "W". A student is not permitted to withdraw after the withdrawal deadline. A faculty member MAY withdraw a student up to the beginning of the final exam period for violation of the class attendance policy. A student who is withdrawn by faculty for violation of the class attendance policy will receive a grade of "W". Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of "F". For a complete policy and procedure overview on Valencia Policy 4-07 please go to:

### http://valenciacollege.edu/generalcounsel/policy/

Effective July 1, 2009, for <u>students on Bright Futures scholarships</u>: Students who withdraw or are withdrawn from a class <u>must pay</u> the college for the cost of the class (because the college must refund that cost to the State).

<u>MAKE-UP POLICY</u>: Make-up work (assignments, quizzes, exams) will be allowed in cases of documented student emergencies. For student emergencies, it is the student's responsibility to contact the instructor and provide documentation within one week unless special arrangements have been made previously.

**ACADEMIC HONESTY:** Each student is required to follow Valencia policy regarding academic honesty. All work submitted by students is expected to be the result of the student's individual thoughts, research, and self-expression unless the assignment

specifically states "group project." Any act of academic dishonesty will be handled in accordance with Valencia policy as set forth in the Student Handbook and Catalog.

No excuse will be accepted for plagiarism.

Students who make their work available to others will also be considered to have been dishonest. Clarification: If someone passes in your homework with their name on it, you have both broken the academic honesty policy.

### **COLLEGE POLICIES:**

A full description of all College policies can be found in the College Catalog: http://valenciacollege.edu/catalog

Policy Manual: <a href="http://www.valenciacollege.edu/generalcounsel/policy">http://www.valenciacollege.edu/generalcounsel/policy</a>

Student Handbook: http://valenciacollege.edu/studentdev/CampusInformationServices/

# **IMPORTANT DATES:**

Class begins: August 30, 2016

Students may withdraw themselves and receive a W up until 11:59 p.m. **Nov 11, 2016**. Students may not be withdraw themselves after that date.

College Closed (Credit Classes Do Not Meet):

Sept 05, Nov 23-27 West Campus only Oct 6

See College calendar for important dates and final exam schedule at <a href="http://valenciacollege.edu/calendar">http://valenciacollege.edu/calendar</a>

# **SPECIAL RULES**:

All email communication with DrA will be by BlackBoard email (this is for organizational purposes).

**STUDENTS WITH DISABILITIES:** Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

East Campus Bldg. 5, Rm. 216 Ph: 407-582-2229 Fax: 407-582-8908 TTY: 407-582-1222 West Campus SSB, Rm. 102 Ph: 407-582-1523 Fax: 407-582-1326 TTY: 407-582-1222 Osceola Campus Bldg. 1, Rm. 140A Ph: 407-582-4167 Fax: 407-582-4804 TTY: 407-582-1222 Winter Park Campus Bldg. 1, Rm. 212 Ph: 407-582-6887 Fax: 407-582-6841 TTY: 407-582-1222

**STUDENT ASSISTANCE PROGRAM:** Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. BayCare Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

**DISCLAIMER:** Changes may be made at the discretion of the instructor. Any changes to this document during the semester will be delivered to each student by BlackBoard email.

Course Learning	Evidence of Learning	
Outcome		
Employ basic systems analysis and design techniques including requirements analysis, design, implementation, and documentation.	<ul> <li>provide creative and clear ideas during the design phase of the product. Such ideas should clearly follow design standards. Copyrights must be taken under consideration in providing those ideas.</li> <li>provide sophisticated evaluation of the product in terms of the criteria established in the design proposal and with reference to information gathered.</li> <li>provide accurate and in-depth comparisons with similar work done by others.</li> </ul>	
Apply sound project management techniques.	<ul> <li>provide detailed justification of choices made in finalizing the design, for example, functional, aesthetic, social, economic, and environmental considerations.</li> <li>provide a detailed study that demonstrates a reasonable cost/time involved in working with the chosen tools</li> </ul>	
Exercise project version control as a part of project development.	<ul> <li>provide a detailed outline of the planning and implementation steps necessary to create the product. For example, software and hardware tools.</li> <li>make creative adjustments as needed to conform to specified standards or regulations regarding quality or safety.</li> </ul>	
Communicate effectively with technical and non- technical audiences.	<ul> <li>professionally and effectively communicate with the client to agree on decisions.</li> <li>professionally present the final product along with providing complete documentation that includes training and maintenance plans and provides future considerations.</li> </ul>	