# CIS 4593 Gaming and Mobile Apps Capstone I (3 Semester Credits)

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### **Catalog Description:**

This is the first of a sequence of two courses where students will have the opportunity to analyze, implement, and deploy complex software systems as enterprise mobile applications, as computer games, and as an appropriate combination of both.

*Prerequisites*: CEN 4535C – Development of Gaming and Mobile Applications and CNT 4514C – Wireless/Mobile Computing

## Learning outcomes for CIS 4593/ CIS 4594:

Upon completion of the two course sequence, students should be able to:

- Elicitation of requirements
- Network and software system design, including testing and redesign
- Periodic customer demonstrations of the system evolution (before the customers)
- Refine functional and non-functional requirements.
- Develop and deploy functional system.
- Test the application on a variety of mobile devices.
- Demonstrate the application to a panel of stakeholders.

## **Method of Teaching:**

Lecture, in-class activities, group projects, and presentations

### **Reference books:**

There is no prescribed textbook for this course. However, listed books are good reference materials for different topics that will be covered in this course.

1. Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development (3rd Edition)

Author: Craig Larman Publisher: Prentice Hall ISBN-13: 978-0131489066 / ISBN-10: 0131489062

Agile Software Requirements: Lean Requirements Practices for Teams, Programs, and the Enterprise (1<sup>st</sup> Edition)
 Author: Dean Leffingwell
 Publisher: Addison-Wesley Professional
 ISBN-13: 9780321635846 / ISBN-10: 0321635841

3. User Stories Applied: For Agile Software Development (1<sup>st</sup> Edition)

Author: Mike Cohn Publisher: Addison-Wesley Professional ISBN-13: 9780321205681 / ISBN-10: 0321205685

4. Use Cases: Requirements in Context, Second edition Authors: Daryl Kulak and Eamonn Guiney Publisher: Addison-Wesley Professional ISBN-13: 9780321154989 / ISBN-10: 0321154983

5. Agile Game Development with Scrum (1<sup>st</sup> Edition) Author: Clinton Keith
Publisher: Addison-Wesley Professional
ISBN-13: 9780321618528 / ISBN-10: 0321618521

#### Method of Evaluation:

Method of Evaluation	Team Assessment	Individual Assessment
Project Deliverable 1	10%	10%
Project Deliverable 2	10%	10%
Project Deliverable 3	10%	10%
Weekly Sprint Review Meeting		5%
and Service Learning Reflective		
Weekly Logbook		5%
Service Learning Retrospective		5%
Essay		
In-Class Assignments		5%
Project Presentation	10%	5%
Class Participation		5%
Sub Total	40%	60%
Total	100%	

Letter grades will be based on:

94 - 100 = A 90 - 93.99 = A- 87 - 89.99 = B+ 84 - 86.99 = B 80 - 83.99 = B- 77 - 79.99 = C+ 70 - 76.99 = C 60 - 69.99 = Dless than 60=F

The penalty for cheating on assignments will be F grade in the course. Work which is similar beyond coincidence will automatically be considered cheating by all parties.

#### Late Assignments:

There will be a penalty of 10 % per day for late submission of assignments (including weekends and holidays).

#### Academic dishonesty:

No type of academic dishonesty will be tolerated. If you are caught cheating (on the assignments) the punishment will be the most severe penalty allowed by the university policy. The policy on academic integrity and misuse of computer equipment and computer accounts found at <a href="http://www.unf.edu/ccec/computing/Policies">http://www.unf.edu/ccec/computing/Policies</a> Guidelines.aspx applies to this course.

#### **Other remarks:**

- A grade of incomplete will not be given except for catastrophic illness or calamity.
- All university rules regarding classroom behavior and attendance apply.
- Attendance is expected. If a student misses a class, the student is still responsible for the material that is covered and for completing any assignments by the due date that may have been handed out by the professor in class.

#### **Course Topics**

It is expected that the student will read the chapter assigned prior to the class meetings and will have questions for the instructor on any topics the student is not sure of, or does not understand. The student is responsible for all topics presented in the text regardless of their coverage. In addition, the students will be responsible for all lecture material that is not included in the text.

Please note that below listing of chapters does not mean that all text in those chapters would be covered in this course. Only that material that very closely pertains to course would be covered. Throughout the course, Instructor would provide other supplementary materials to provide targeted guidance to team project deliverables.

Week	Date	Chapters	<b>Deliverable Dues</b>
1	Introduction and syllabus		
	Software Development Best		Project Team due
	Practices		
2	Community Partners and Project	TB1- Chapter 2	
	details	TB2 – Chapter 1	
	Rational Unified Process and	TB5 – Chapter 3	Project Selection
	Agile/SCRUM methodology		Due
3	Requirements Analysis: User Stories	TB2 – Chapter 6	
		TB3 – Chapters 1 –	
		7	
		TB5 – Chapter 5	
4	Non-Functional Requirements	TB1- Chapter 7	
		TB2 – Chapter 17	
5	Project Management: Estimating	TB2 – Chapters 15	
	User Stories and Release Planning	and 16	
		TB3 – Chapters 9	

		and 10	
		TB5 – Chapter 6	
6	First Iteration Sprint Review	TB5 – Chapter 4	
	_	_	Deliverable 1 due
7	Use Case Analysis and Modeling	TB1- Chapter 6	
		TB2 – Chapter 19	
8		TB 4 –	
		Chapters 2 – 8	
9	Analysis and Design	TB1 – Chapters 1	
	Object Orientated Principles	and 9	
10	Second Iteration Sprint Review	TB5 – Chapter 4	
			Deliverable 2 due
11	Design Analysis and Modeling	TB1 – Chapters 10	
		-1/	
12			
13	Interface Prototypes		
14	Third Iteration Sprint Review	TB5 – Chapter 4	
15	Product Demo and Poster		
	Presentations during the SOC Student Symposium		Deliverable 3 due

\*\*\*Please Note\*\*\*

Instructor reserves the right to modify course to meet the student's needs.

Legends

TB1 – Applying UML and Patterns

TB2 – Agile Software Requirements

TB3 – User Stories Applied

TB4 – Use Cases: Requirements in Context

TB5 – Agile Game Development with Scrum

#### **Students with Disabilities**

Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in Honors Hall, Building 10, Room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriate accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and if so, the accommodations the student requires will be provided. DRC staff then will prepare a letter for the student to provide faculty advising them of approved accommodations. Military and veteran students who return from combat exposure may be utilizing the post-9/11 GI bill to continue postsecondary education goals. For further information, contact the DRC by phone at (904) 620-2769, e-mail (kwebb@unf.edu), or visit the

DRC website (http://www.unf.edu/dept/disabled-services). Military and veteran students may need both physical, emotional, and academic accommodations. Contact Cindy Alderson, director of Military and Veterans' Resource Center, by phone at (904) 620-2655 or by e-mail at cindy.alderson@unf.edu.

#### **Satisfactory Progress Policy**

The School of Computing enforces the "one repeat" rule for all prerequisite and core courses offered by the School for its major programs. Students who do not successfully complete a prerequisite or core requirement for a School of Computing course on the first attempt (i.e., earn a grade of D, F, W, WP or WF) will be granted one chance to repeat the course. Students who do not successfully complete a prerequisite or core requirement within two attempts will not be permitted to register for courses offered by the School in future semesters. This stipulation applies whether or not the student has declared a major in a School of Computing program. http://www.unf.edu/ccec/computing/PoliciesGuidelines/Satisfactory\_Progress\_Policy.aspx

### **Community-Based Transformational Learning**

Community-Based Transformational Learning is about providing students with first-hand experiences that take them outside the walls of the classroom and into the community. By engaging in these activities, UNF students learn how to translate theory into practice, strengthen their sense of civic and ethical responsibility, and gain from professional and career development opportunities. In many cases, these experiences transform the lives of students. (http://www.unf.edu/ccec/soc/cbtl.pdf)