

## **Syllabus**

**Course Number: CS 493**

**Course Title: Senior Capstone**

### **Course Description:**

Provides the culminating experience of the major, focusing on integration and application of theory. Must be completed as graded course work at Regis University.

### **Prerequisite Courses:**

Senior standing, successful completion of 18 upper division CS credit hours.

### **Course Overview**

The Senior Capstone course requires students from The School of Computer and Information Sciences (SCIS) to complete a Capstone Project that integrates, applies, and reflects upon a diverse cross-section of the learning outcomes associated with their Undergraduate course work.

### **Course Outcomes:**

Upon completion of this course, learners should be able to:

1. Demonstrate their ability to critically analyze a problem, and identify and define the computing requirements appropriate to its solution.
2. Demonstrate their ability to apply knowledge of computing appropriate from their degree discipline to a significant computing problem.
3. Demonstrate their ability to creatively design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
4. Demonstrate critical and creative thinking about professional, ethical, legal, and social responsibility including the local and global impact of their computing solution on individuals, organizations, and society.
5. Demonstrate proficiency in written, oral, and computing communications skills.
6. Demonstrate their ability to extend and refine their computing knowledge and skills in the realization of their academic, personal, and professional goals related to a significant computing problem.

## Course Materials:

### *Required Texts:*

Leedy, P. D., & Ormod, J. E. (2010). *Practical research: planning and design* (9<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

### **Pre-Assignment:**

A Concept Draft is a one page document that states what will be done in your Capstone Project. Prepare a Concept Draft.

**Online Format:** Sign on to D2L worldclass.regis.edu and become familiar with the course navigation of the Web Curriculum. Complete the assignment above.

**Classroom-based Format:** Complete the assignment above by the first night of class.



### Course Assignments and Activities:

	Topics	Readings	Activities Assignments and Associated Points*
1	<ul style="list-style-type: none"> <li>Capstone Overview</li> </ul>	Ch. 1 – 3	Participation in Discussions for Entire Course (10%) First Night Assignment: Concept Draft (10%)
2	<ul style="list-style-type: none"> <li>Proposal</li> </ul>	Ch. 6	Scholarship Project Proposal (10%) Stakeholder Approval Letter
3	<ul style="list-style-type: none"> <li>Reviewing the Research Literature</li> <li>Planning a Research Project</li> </ul>	Ch. 4 & 5	Project Status Report (2.5%) Feedback Critique Report
4	<ul style="list-style-type: none"> <li>Qualitative &amp; Quantitative Research</li> </ul>	Ch. 7 & 9	Project Status Report (2.5%)
5	<ul style="list-style-type: none"> <li>Reporting Scholarship</li> </ul>	Ch. 12	Project Status Report (2.5%)
6	<ul style="list-style-type: none"> <li>Independent Study</li> </ul>		Project Status Report (2.5%) (includes presentation plan)
7	<ul style="list-style-type: none"> <li>Independent Study</li> </ul>		
8	<ul style="list-style-type: none"> <li>Presentations</li> </ul>		Final Project Deliverables <ul style="list-style-type: none"> <li>Capstone Scholarship Paper (15%)</li> <li>Capstone Product (15%)</li> <li>Capstone Product Presentation (20%)</li> <li>Capstone Reflection Paper (10%)</li> </ul>
		<b>Total</b>	<b>100%</b>

\*First night assignment is due on the first day of class. Other assignments are due at the end of the week (online) or the beginning of the next class (classroom).

## Course Policies

All assignments must conform to APA style guidelines.

### Assignments

*Concept Draft* – is a one page document that states what will be done in your Capstone Project. It describes the problem or opportunity addressed in the Capstone, a goal indicating how the Capstone proposes to address the problem, clarifying objectives and scope boundaries, success criteria indicating how you plan to assess and evaluate the capstone, and any assumptions, risks, or obstacles you foresee.

Final Deliverables:

*Capstone Product* – the Capstone Product is the artifact that you will create or build in order to deliver to your ‘customer’ stakeholder. For example, if you are developing a Web application for a non-profit organization, this application and any associated software engineering artifacts is the Capstone Product.

*Capstone Scholarship Paper* – this scholarly paper is the primary deliverable used to present your completed capstone to the School of Computing and Information Sciences. The format of this paper follows standard guidelines for presenting scholarly work and is based upon APA standards (e.g. abstract, introduction, background, approach, results, and discussion). The audience for this paper is the SCIS faculty and the software community associated with the topical area of your capstone.

*Capstone Presentation* – this PowerPoint presentation presents the work completed in your Capstone Scholarship paper, typically in a summarized, but inclusive form. The audience for this presentation is similar to the Scholarship Paper, but also includes your fellow classmates.

*Capstone Reflection* – this document requires you to reflect upon your Undergraduate experience with Regis University, SCIS, and the Capstone course itself.

**Student Evaluation Summary**

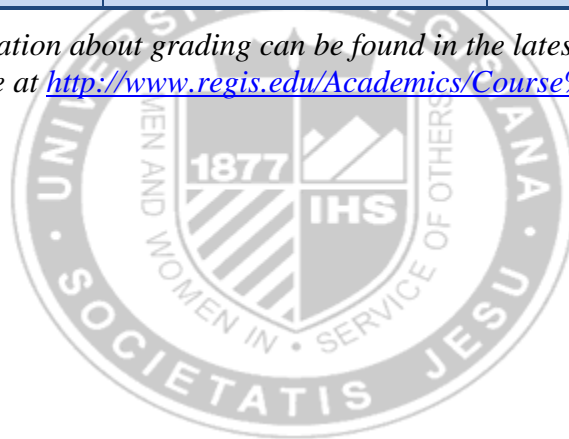
<b>Assignment</b>	<b>Value (percent of overall course grade)</b>
Participation & Feedback	10%
Concept Draft	10%
Proposal	10%
Project Status Reports (4)	10%
Final Capstone Presentation	20%
Final Capstone Scholarship Paper	15%
Final Capstone Product	15%
Final Capstone Reflection Paper	<u>10%</u>

<b>TOTAL</b>	<b>100 %</b>
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### CC&IS Grading Scale

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A-	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B-	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C-	70 to less than 73	1.67
D+	67 to less than 70	1.33
D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx>.



## CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as identified here and specified in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx> or at the link provided.

- The CC&IS Academic Integrity Policy.
- The Student Honor Code and Student Standards of Conduct.
- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.
- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the [U.S. Department of Education](http://www.ed.gov).
- The HIPAA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: <http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx>.
- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: <http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx>.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus

Addendum can be found here:

<https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx>.