Requirements of the Capstone

There are three milestones that all capstone students in the Department are required to achieve. Research mentors have the right to set other requirements in addition to those defined here. Each student, whether CS or IT, is required to complete the following:

Prospectus – a document containing the following sections. (The prospectus may include additional sections relevant to the specific work)

Problem Statement – describes the problem or issue that will be addressed by this work. Articulate your objectives without using jargon. This section should address the what, why, who, how, when, and where.

Significance of Work – describes the extent to which this work affects, or is important to, the intended field or organization.

Methodology – describes the systematic process that will help achieve the objectives of this work.

Proposal – an in-depth document containing the following sections.

Problem Statement – Describe the problem or issue that will be addressed by this work. Articulate your objectives without using jargon. This section should address the what, why, who, how, when, and where.

Background – Addresses the following two areas:

- i. *Previous Work* provides a survey of the work that has been done up to the present. What is done today and what are the limitations of these approaches.
- ii. Significance of Work describes the extent to which this work affects, or is important to, the intended field or organization. How does your work improve on the work discussed in item i above. What is new in the proposed approach?

Methodology – describes the systematic process that will help achieve the objectives of this work.

Feasibility Study – describes the strengths and weaknesses of this proposed work; the opportunities and threats presented by cost, resources, and other relevant factors. For a software deliverable, discuss the capabilities of the intended customer in terms of software, hardware, personnel, and expertise to handle the deliverable.

Timeline – provides a detailed breakdown of the time schedule of the project milestones leading up to the final presentation.

Budget – provides a breakdown of the cost necessary to successfully complete the project. This can include, but is not limited to, hardware and software.

References – Use the ACM citation style and reference format which can be found <u>here</u>.

Final Presentation to the Department

A summary of the research and the results achieved. The following should be components that are included:

Problem Statement - Describe the problem or issue that will be addressed by this work. *Should be taken from proposal*.

Background – Addresses the following two areas.

Previous Work – provides a survey of the work that has been done up to the present. What is done today and what are the limitations of these approaches.

Significance of Work – describes the extent to which this work affects, or is important to, the intended field or organization. How does your work improve on the work discussed in item I.A.1.i above. What is new in the approach being proposed?

Methodology – describes the systematic process that achieved the objectives of this work.

Results – describe or demonstrate the results of the work.

In addition, all capstone students are *required* to give *monthly update presentations* to the Department. These presentations will be scheduled by the chairperson and will take place during the University's Common Hour.

Timeline and Responsibilities

Milestone/Deliverable	Due Date	Responsibility
Student Project Discovery Meetings	March, 2015 – June, 2015	Student
Research mentor selection	June 30, 2015	Student
Registration for Capstone	July 31, 2015	Student
Prospectus defense	Tuesday, September 15, 2015	Chairperson
Prospectus submission	Set by capstone mentor	Student
Monthly update presentation	Tuesday, October 13, 2015	Student
	Tuesday, November 17, 2015	
Proposal submission	Set by capstone mentor, but must be prior to	Student
	October 6, 2015	
Presentation abstracts	Friday, November 27, 2015	Student
Final Presentation	CIS Day (Reading Day)	Student
	Friday, December 4, 2015	
Final report, manual, research paper, or product	Set by capstone mentor	Student

General Timeline

Selecting a Mentor and Registering for a Capstone

During the period preceding the semester in which the capstone will take place (also see Table 1 below), the student

- 1. Meets with faculty members to discuss capstone project ideas. This is completely driven by the student with no intervention from the Department.
- 2. Selects a faculty member to serve as capstone mentor. The student is required to submit a written request to the faculty in question requesting that the faculty member serve as capstone mentor. Both the student request and the faculty member's reply should be copied to the chairperson. Preferably, a student should decide on a faculty capstone mentor by the last day of classes in the semester preceding the semester in which the capstone will take place.
- 3. Registers for CSCI-495 CS Capstone Project or INFO-495 IT Capstone Project. Students will not be allowed to register for a capstone course without securing a capstone mentor.

During the semester of the capstone

- 1. The student must submit a prospectus (see section I.A) by the first capstone update talk of the semester. This deadline holds unless modified by the mentor due to extenuating circumstances.
- 2. Faculty members attend a prospectus defense scheduled at least two weeks prior to the midterm evaluations. Faculty feedback is provided to the capstone mentor.
- 3. The student must submit a proposal (see section I.B) prior to midterm evaluations. The precise deadline is set by each individual capstone mentor. NOTE: Should the capstone advisor not provide the deadline within the first week of classes, it is the responsibility of the capstone student to inquire about the deadline for the proposal. The proposal must be turned in, at the latest, the Friday before midterm grades are due.
- 4. The student must participate in a monthly status presentation. The first will be a prospectus defense; the rest will be update presentations. A capstone mentor may stipulate additional requirements.
- 5. The student must give a final presentation to the Department during CIS Day (Reading Day). Abstract submission deadlines are announced by chairperson.
- 6. The student submits final artifact(s) as required by the capstone mentor. Deadline is dictated by the capstone mentor in the syllabus.