## CSC 131

## Computer Software Engineering

## Software Engineering Development Process

### **Iterative and Agile Process**

### **Planning, Design, Implementation and Testing**

1. **Project Inception**

* Client visits and discussions
* Elicitation – Requirement discovery and requirements gathering
* Understanding stakeholder’s “pain points”, needs and project scope

1. **Sprint Planning:**

**2.1 Project scope and requirements:**

* Develop and finalize requirements
* Select a set of core requirements
* Start the test planning–
  + Validate requirements -review requirement’s completeness and clarity
  + Test in each sprint & test early and often
* Reference - Deliverable #2

**2.2 Design: (High Level design and Low-level design)**

* Explore possible solutions
* Review requirements and reduce assumptions
* Develop system design models
* Finalize technology tools selection and document constraints
* Reference - Deliverable #2

**2.3 Development - Start development and sprints- (tentative 2 weeks sprint)**

**Steps to follow for Sprints.**

**Sprint #1**

* Review the set of requirements (the ones selected in step 2.1)
* Start implementation (coding)
* Develop, test, and complete Sprint #1 Prototype
* Demo prototype #1 to our client
  + Document client’s feedback and input
  + Review client’s feedback and recommendations with your team
* Repeat step ***1 and 2*** for the rest of the sprints (sprint 2,3,4)

1. **System Deployment:**

* Deliver the completed App to the client
* Conduct a “Final Project Presentation”