COURSE SYLLABUS

CS390 • Capstone Studio & Defense

School of Computational Arts & Sciences • Undergraduate • 12 ECTS

Overview

A mentored capstone studio culminating in an external-style review. Students propose, build, and ship a substantial artifact with documentation, evaluation, and an oral defense; emphasis on scope control, iteration, and evidence of impact.

LOGISTICS

Credits: 12 ECTS
Level: Undergraduate
School: School of Computational Arts & Sciences
Prerequisites: None listed
Tags: capstone, portfolio, defense
Meeting time: Studio format: weekly critiques + milestone reviews
Instruction mode: Mentored capstone with external review and defense

LEARNING OUTCOMES

You will be able to:
- Define a scope that is feasible and measurable within a term
- Produce an artifact with documentation, evaluation, and a maintenance plan
- Defend design decisions using evidence (tests, metrics, user feedback)
- Define a scope that is feasible and measurable within a term
- Produce an artifact with documentation, evaluation, and a maintenance plan
- Defend design decisions using evidence (tests, metrics, user feedback)

ASSESSMENT

Components
- Coursework: 60%
- Final project: 40%

Assessment is milestone-based. Each milestone is judged on evidence quality: logs, rationale, evaluation results, and revision history. The final defense includes a short demo
and a Q&A focused on trade-offs.

WEEKLY PLAN

Schedule
Week 1: Week 1
  - Proposal: scope, users, constraints, and success criteria
Week 2: Week 2
  - System design: architecture, risks, and evaluation plan
Week 3: Week 3
  - Implementation sprints: weekly deliverables with logs
Week 4: Week 4
  - Midpoint review: demo + failure analysis

Extended outline
- Proposal: scope, users, constraints, and success criteria
- System design: architecture, risks, and evaluation plan
- Implementation sprints: weekly deliverables with logs
- Midpoint review: demo + failure analysis
- Polish: documentation, accessibility, and reproducibility
- Defense: presentation + Q&A + postmortem

POLICIES & RESOURCES

- Sustainability: scope reductions are encouraged when justified.
- Integrity: represent results honestly; include limitations.
- Collaboration: pair reviews are mandatory; code ownership remains individual/team-based per project.

Suggested resources
- Capstone rubric: scope, evidence, quality, communication
- Reproducibility pack: setup steps, commands, expected outputs
- Presentation template: problem, constraints, approach, evidence, limits