

OOAD Class assignment schedule (updated 1/20/20)

- Graduate Research Project (1-2 student team) – 250 points Updated 1/20
 - Topic Proposal – Assigned Wed 1/22, due Fri 2/7
 - Topic Review – Assigned Fri 2/7, due Fri 2/21
 - First Draft – Assigned Fri 2/21, due Fri 3/20
 - Pecha Kucha - Assigned Fri 3/20, due Mon 4/20
 - Final Draft – Assigned Fri 3/20, due Wed 4/29
- Projects (1-3 student team) – 500 points
 - Project 1 – Assigned Wed 1/22, due Fri 1/31
 - Project 2 – Assigned Fri 1/31, due Fri 2/14 (includes Semester Project Topic)
 - Project 3 – Assigned Fri 2/14, due Mon 3/2
 - Project 4 (Semester Project Design) – Assigned Fri 2/28, due Fri 3/20
 - Project 5 (Interim Project Report) – Assigned Fri 3/20, due Mon 4/6 (for demos)
 - Project 6 (Final Project Submission) – Assigned Fri 3/20, due Mon 4/27 (for demos)
- Midterm – in class – Fri 3/6 – 150 points
- Finals week 5/2 – 5/6 – 150 points
- First Quiz posted Fri 1/24 or Sat 1/25, due Wed 1/29 – 10 points/quiz, 10 quizzes
 - Generally, quizzes are posted on Canvas on Friday or Saturday, due the following Wednesday
- Extra credit optional assignment – around Mon 4/6

Typical semester projects (1 to 3 people on project teams)

- Automated Greenhouse (Raspberry Pi based)
- Family Story web application
- Chess companion program
- Job Portal web app
- 2D Dungeon game
- Swivel Stones (Candy Crush-like) mobile app
- Library System simulation web app w/DB backend
- Pirates vs Ninjas game (C#/Unity)
- Raspberry Pi voice interface Scheduler
- Scientific Calculator Android application
- ClassQA class quiz web tool
- TidyTunes web/mobile tool for cleaning Spotify
- Monopoly game app
- Simulated Smart home
- Memorization game mobile app
- Automated Restaurant Ordering & Serv. System web app
- Weather Fashion – expert system for what to wear by weather forecast
- Food management – shopping/recipe tool
- Adopt A Pet – web based management tool
- IPA: Image Processing Application – Windows app
- Happy Hour Website – tracks happy hours at local establishments

- ATM Simulation
- Alexa and Website Automated Dungeon Master
- Agent-based model of firefly mating strategy
- A robust bridge between Keras and Scikit-learn
- Chess iOS app

Typical graduate project topics (1 or 2 person research teams)

- Java : Is its dominance in industry numbered or just sailing through rough waters?
- TDD in Python
- Comparing the practical applications and performance of Java vs C++
- Keras vs PyTorch: An Object Oriented Comparison
- Exploring Kafka Framework using Object Oriented Paradigm
- Analysis of Spring framework
- Hibernate framework & data persistence - an analysis
- A Modern Survey of Multiple Inheritance in Object-Oriented Languages
- UML for object-oriented analysis and design
- Node.js in Object Oriented Analysis & Design
- Python in Data Science-Multi-processing vs Threading
- Java vs Node.js comparison
- An OOP Approach to ROS Development
- Automated selection of data structures and algorithms
- OO Natural Language Processing Frameworks
- The Benefits of an Object Oriented Tool for Interdisciplinary fNIRS Analysis
- Examining an AR-Facilitated Human-Robot Negotiation Study as an Object Oriented System
- Effect of object oriented measures on external quality attributes of a system
- Object oriented principles in Scala Vs Java
- The Evolution of Object Oriented Programming: Comparing its Origins with Modern Day Practices