# COSC 412
# Syllabus

Spring 2025

Dr. Akshita Maradapu Vera Venkata Sai
Department of Computer and Information Sciences
Towson University

# Important Note

- This syllabus is only a plan.
- Changes may be made based on the course and student's need.
- **OPT OUT of Redshelf / Direct Access** to avoid making unnecessary payments.

# About me

- Akshita Maradapu Vera Venkata Sai
  - Ph.D. Computer Science, Georgia State University
- Teaching
  - Software Engineering
  - Data Mining
  - Internet of Things
  - Privacy Aware Computing
- Research Interests : Digital Twins, Internet of Things, Mobile Edge Systems, Location based services, Social Networks, Privacy Aware Computing.

# Personnel

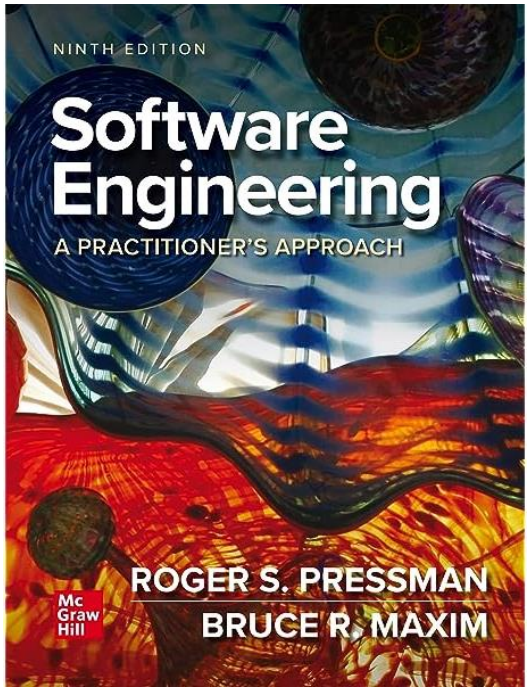
| | |
|---|---|
| **Instructor** | **Akshita Maradapu Vera Venkata Sai** |
| **Class Time** | Monday and Wednesday 11 AM – 12:15 PM, , YR 407 |
| **Office hours** | Monday 1 PM to 1:45 PM, 7800 York Rd, 438 or Webex by appointment |
| **Email** | amaradapuveravenkatasai@towson.edu<br>All emails must have COSC412 in the subject line, and only emails coming from @students.towson.edu will be answered. |
| **Course Website** | All the course contents will be published on Blackboard |

# Teaching Assistant Information

- TA Contact
  - Fatima Malik
  - Email: fmalik5@students.towson.edu
  - Office hours: Friday 10 AM – 11 AM
  - Office Location: TBD
  - Role: Tests and Assignments grader

# Textbook and Prerequisites

- Required textbook: “Software Engineering- A Practioner’s Approach” by Pressman&Maxim, 9th edition




- Prerequisites:
  - COSC 336- Data Structures and Algorithm Analysis (grade of C or higher)

# Grading Plan and Policies

| Element | Date and Time | Weight |
|---|---|---|
| **Project** | As assigned on blackboard | 40% |
| **Homework** | As assigned on blackboard | 20% |
| **Mid-term** | March 10th during class | 20% |
| **Final Exam** | May 14th (10:15 AM – 12:15 PM) | 20% |

# Grading Policy - Tests

- **Tests content** will come from
  - the **text** and
  - other **material presented** or **provided in lecture** sessions.
  - Note that material presented in class will supplement the assigned reading.
- **Midterm will include contents covered until before the midterm**
- **Final exam will be non-cumulative.**

# Grading Policy - Tests

- A **grade of zero** will be assigned for
  - all tests missed for which a **student does not have an excused absence**.
- Contacts information about TA responsible for tests grading will be posted on Blackboard
  - **TA will be grading Tests**
- Cheat Sheet:
  - One A4 paper size, two sides, hind written is allowed.
  - **Printed copy is not allowed** and **a copy of handwritten is not allowed.**
- Closed book and notes.

# Grading Policy - Tests

- **All re-grading requests must be made within 2 classes from returned work.**
- If you will not be able to take a test due to an *exceptional reason:*
  - e.g., illness, death of family member
  - *that can be officially documented*,
  - you must notify the instructor for possible alternative arrangements.

# Grading Policy Project

- Project
  - A **team project is mandatory** for this class.
  - students may select their own topic which must be approved by the instructor.
- Project breakdown is as follows:
  - Initial survey – 5%
  - Project Proposal  ( Sprint 1 ) ----20%
  - Mid Semester Progress (Sprint 2) --- 20%
  - Final Report, Presentation, Code Documentation ---50%
  - Confidential Peer Evaluation ---- 5%

# Grading Policy – Project

- There will be 3 reports that are due at different times during the semesters:
  - Project Proposal (Sprint 1)
  - Mid semester progress (Sprint 2)
  - Final report
- All the submissions should be made to the blackboard folder
- Clear instructions regarding project will be provided

- Initial survey – 5%
- **Project Proposal ( Sprint 1 ) ----  20%**
- **Mid Semester Progress (Sprint 2) --- 20%**
- **Final Report,** Presentation, Code Documentation ---50%
- Confidential Peer Evaluation ---- 5%

# Grading Policy – Project

- **Presentation:**
  - Each group must be prepared to **deliver a formal presentation** on May 7th and 12th, 2025 during the class.
  - **Each member of the group must participate in the presentation** of the project by presenting some part of the project
    - i.e. talking about some part of the project during the presentation
  - Should any **member of a group be absent at the time of presentation**,
    - she/he will **get 0 regardless** of the score of the group for the presentation.

- Initial survey – 5%
- Project Proposal ( Sprint 1 ) ---- 20%
- Mid Semester Progress (Sprint 2) --- 20%
- Final Report, **Presentation, Code Documentation ---50%**
- Confidential Peer Evaluation ---- 5%

# Grading Policy – Project

- **Documentation**
  - A clear documentation of your code needs to be **submitted along with the final report.**
  - More instructions on this will be provided at a later point in the semester.
- **Confidential Peer Evaluation**
  - All the team members **must evaluate** each other.
  - This will be counted towards **5% of your project grade**.
  - The instructor will provide a form for this on black board.

- Initial survey – 5%
- Project Proposal ( Sprint 1 ) ---- 20%
- Mid Semester Progress (Sprint 2) --- 20%
- Final Report, Presentation, Code Documentation ---50%
- **Confidential Peer Evaluation ---- 5%**

# Grading Policy - Assignments

- All assignments are due ON or BEFORE the due date.
- Assignments will be submitted to Blackboard folder
- Late **penalty of 10%** will be applied for **every 24 hours delay** in submission
- **TA will be grading the assignments**.
- **Instructor will be grading the project reports**.

# Grading Policy - Assignments

- If you will **not be able to make an assignment deadline** due to an ***exceptional reason***
  - e.g., illness, death of family member
  - *that can be officially documented*,
  - you must notify the instructor for possible alternative arrangements.
- All re-grading requests must be made **within 2 classes from returned work**.
- No dropping lowest assignment score.

# Grading Scale

| | | | | | |
|---|---|---|---|---|---|
| A | 95-100 | B- | 80-82.9 | D | 60-66.9 |
| A- | 90-94.9 | C+ | 75-79.9 | F | Below 60 |
| B+ | 87-89.9 | C | 70-74.9 | | |
| B | 83-86.9 | D+ | 67-69.9 | | |

# Attendance

- Students are expected to attend all the classes.

- It is the student’s responsibility to cover the content and the reading material in case they do not attend the class.

# Academic Conduct

- Collaboration with your classmates in studying and understanding the material is strongly encouraged.
- **Copying** another's work will be **considered cheating**;
  - all students involved will receive a grade of zero or reduction in grade,
- **Collaboration or cheating** on **examinations** or **Plagiarism**, **fabrication**, **or other academic dishonesty or misconduct**
  - will result in a grade of zero, reduction of grade or dismissal from the university

# Course Plan

| Week | Date | Topics |
|---|---|---|
| **1** | **Jan 27** | **Syllabus** |
| | Jan 29 | Introduction to Software Engineering |
| **2** | Feb 3 | Software Engineering Process |
| | Feb 5 | Process Models |
| **3** | Feb 10 | Agile SDE |
| | Feb 12 | Agile SDE |
| **4** | Feb 17 | Software Requirements |
| | Feb 19 | Requirements Engineering |
| **5** | Feb 24 | UML – Use cases and Diagrams |
| | Feb 26 | UML Sequence Diagram |
| **6** | Mar 3 | UML Class Diagram |
| | Mar 5 | UML Class Diagram, Midterm Review |
| **7** | **Mar 10** | **Midterm** |
| | Mar 12 | Object oriented Software Design |

# Course Plan

| Week | Date | Topics |
|---|---|---|
| **8** | **Mar 17** | **Spring break** |
| | **Mar 19** | **Spring break** |
| **9** | Mar 24 | Object oriented Software Design |
| | Mar 26 | Software Architecture Design |
| **10** | Mar 31 | Component level Design |
| | Apr 2 | UI design |
| **11** | Apr 7 | UI design |
| | Apr 9 | Software usability |
| **12** | Apr 14 | Usable Security |
| | Apr 16 | Software Testing |
| **13** | Apr 21 | Software Testing |
| | Apr 23 | Software Testing |
| **14** | Apr 28 | Quality Assurance |
| | **Apr 30** | **Buffer Class** |
| **15** | **May 5** | **Buffer Class** |
| | **May 7** | **Project presentations** |
| **16** | **May 12** | **Project presentations** |