

**SU DEPARTMENT OF COMPUTER SCIENCE SYLLABUS
COSC 425/426**

Description: A study of classical and object-oriented software engineering principles and methods.

covered. There

- “Software Engineering” (9ed) by Sommerville; Addison Wesley, 2010.
- “The Mythical Man-month” by Brooks, Jr; Addison Wesley, 1995.
- “Object-oriented and Classical Software Engineering” (8ed) by Schach; McGraw, 2011.
- “Introduction to Software Testing” (2ed) by Ammann and Offutt; Cambridge, 2014.
- “The Unified Modeling Language Reference Manual” (2ed) by Booch, Rumbaugh and Jacobson; Addison Wesley, 2004.

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|---|-----|
| Overview. Historical perspective. Agile and traditional software development processes. | 2.0 |
| Project management principles. Project planning and software cost estimation. | 4.0 |
| Requirements analysis and specification. Prototyping. Architectural and detailed designs. | 4.0 |
| Object-oriented concepts, analysis and design methods and principles. UML. | 4.0 |
| Test planning, processes, and strategies. Software reviews and inspections. Open -source software development. | 4.0 |

2.0
28.0

EVALUATION

Projects 60%
Exams 40%

XSW/SPW

5/2021