

CSCI 5801 - Software Engineering

Fall 2026 Syllabus, Section A01, CRN 43582,

Credit hours: 3

Instructor

Robert Kramer

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Public Instructor Information

Instructor Title: Associate Professor

Instructor Professional Qualifications: PhD, Computer Science, University of Pittsburgh, 1998

MS, Computer Science, University of Pittsburgh, 1991

BS, Mathematics / Computer Science,

Youngstown State University, 1987

Instructor Office Location: 326 Meshel

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Course Description

5801. Software Engineering. Developing and maintaining complex software systems. Process and life-cycle models, and tools for software development (such as CASE). Specification methods, prototyping, validation and verification strategies, and version maintenance. Management of the system development process. A group project is required. Prereq.: CSIS 3701 or graduate standing. 3 s.h.

Course Readings

Group	Title	Author	ISBN
	Software Engineering, 10th edition	Sommerville	978-0133943030

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Tentative Course Schedule

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
10/19	Chapter 1 Chapter 2	Introduction Development Processes and Models	Team Selection
10/26	Chapter 3	Agile Methods	Project Plan
11/2	Chapter 4	Requirements Analysis	
11/9	Chapter 5 Chapter 6	System Modeling Architecture and System Design	System / Program Design
11/16	Chapter 7	Program Design and Implementation	
11/23	Chapter 8	Unit and System Testing	Testing
11/30	Chapter 9	Software Maintenance	Final Report Project Deliverable Video Presentation

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.