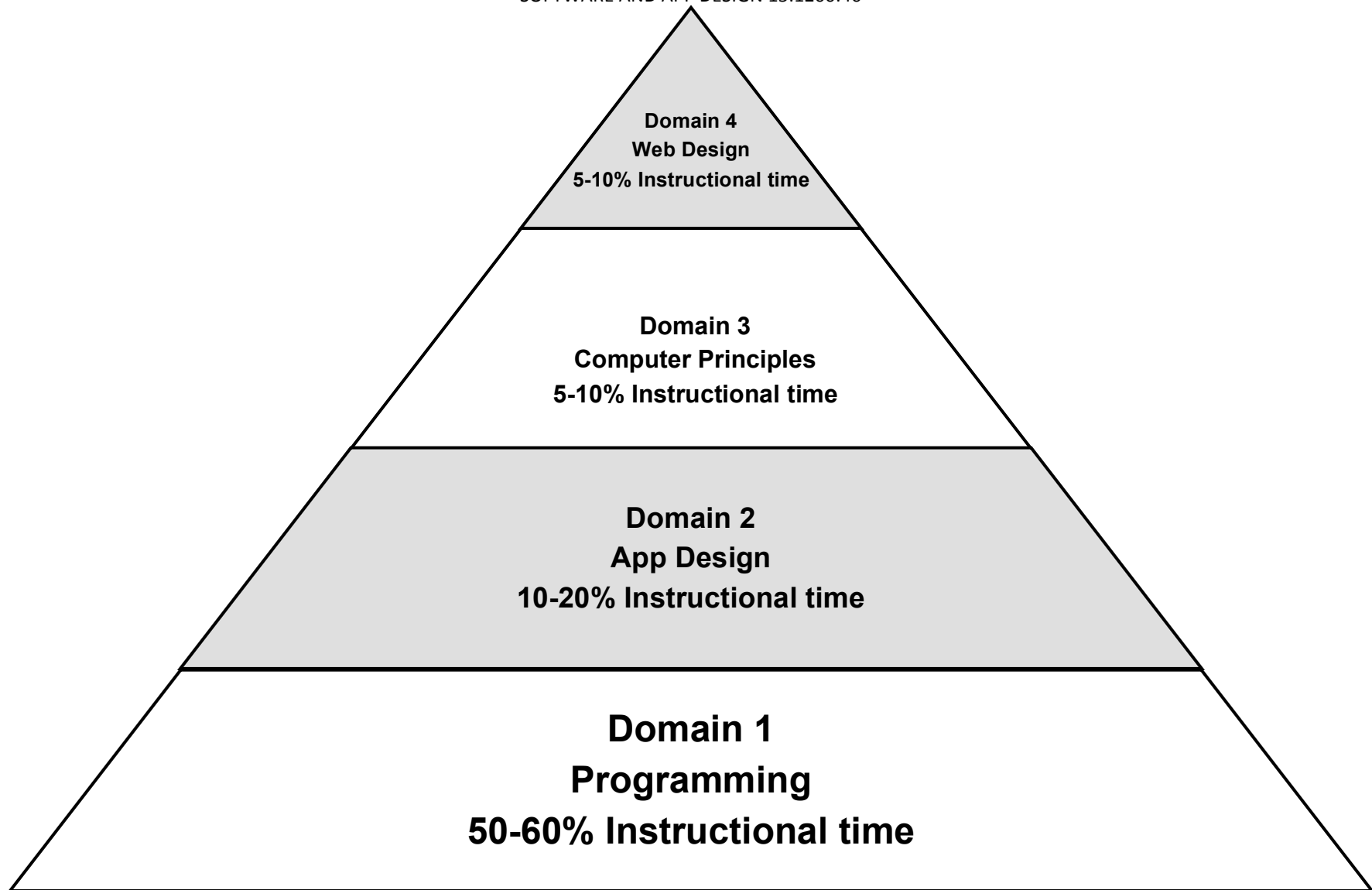


Content Domains

SOFTWARE AND APP DESIGN 15.1200.40



The technical standards for the Software and App Design Program are clustered in 4 domains. The greatest percentage of instructional time will be spent on domains 1 and 2 with less time on domains 3 and 4. Students who complete the program should demonstrate a thorough knowledge in each of these domains.

Content Domains, Standards and Instruction

SOFTWARE AND APP DESIGN

15.1200.40

Domain	Related Standards	Instructional Time
Domain 1 Programming	STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND STRINGS IN WRITING PROGRAMS STANDARD 5.0 PERFORM BASIC COMPUTER MATHEMATICS IN INFORMATION TECHNOLOGY STANDARD 6.0 UTILIZE CONDITIONAL STRUCTURES IN WRITING PROGRAMS STANDARD 7.0 UTILIZE ITERATIVE STRUCTURES IN WRITING PROGRAMS STANDARD 8.0 UTILIZE BASIC DATA STRUCTURES IN WRITING PROGRAMS STANDARD 14.0 UTILIZE AND CREATE COMMUNITY RESOURCES STANDARD 15.0 USE VERSION CONTROL SYSTEMS STANDARD 18.0 EMPLOY OBJECT-ORIENTED PROGRAMMING TECHNIQUES	50-60%
Domain 2 App Design	STANDARD 11.0 DEMONSTRATE PROGRAM ANALYSIS AND DESIGN STANDARD 12.0 DEVELOP A PROGRAM STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAM OPERATION STANDARD 17.0 USE AND UPDATE DATA STORAGE AND MANAGEMENT STANDARD 19.0 EMPLOY RUN TIME AND ERROR HANDLING TECHNIQUES	10-20%
Domain 3 Computer Principles	STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS STANDARD 2.0 RECOGNIZE SECURITY ISSUES STANDARD 3.0 EXAMINE LEGAL AND ETHICAL ISSUES RELATED TO INFORMATION TECHNOLOGY	5-10%
Domain 4 Web Design	STANDARD 9.0 IDENTIFY INTERNET PROTOCOLS AND OPERATIONS STANDARD 10.0 APPLY CLIENT-SIDE INTERNET SOFTWARE STANDARD 16.0 APPLY USER DESIGN PRINCIPLES TO INCLUDE WEBSITES AND APPLICATIONS	5-10%

Content domains are bodies of knowledge, skills or abilities to be taught or assessed. They are clustered as related to technical standards for instruction. The suggested percentage of instructional time is listed for each domain. Instructional time corresponds to the percentage of assessment items included on the Technical Skills Assessment 2018