ITMD 413 RUBRIC

ITMD 413 Open Source Programming
Students may be scored on a scale of 1 to 5; scores of 2 and 4 may be interpolated.

Program Educational Objectives			
Objective **Score ▶**	**5**	**3**	**1**
Perform requirements analysis, design and administration of computer and network-based systems conforming to policy and best practices, and monitor and support continuing development of relevant policy and best practices as appropriate.	The student is consistently able to perform requirements analysis, to design and administer computer and network-based systems conforming to policy and best practices, and to monitor and support continuing development of relevant policy and best practices as appropriate	The student is generally able to perform requirements analysis, to design and administer computer and network-based systems conforming to policy and best practices, and to monitor and support continuing development of relevant policy and best practices as appropriate, but this may not be consistent	The student is unable to perform requirements analysis, to design and administer computer and network-based systems conforming to policy and best practices, or to monitor and support continuing development of relevant policy and best practices
Course student outcomes Upon completion of this course the student should be able to do the following:			
Outcome **Score ▶**	**5**	**3**	**1**
Write, compile, execute, troubleshoot, and resolve problems using the Python Programming Language and its features	The student is consistently able to write, compile, execute, troubleshoot, and resolve problems using the Python Programming Language and its features	The student is able with some assistance to write, compile, execute, troubleshoot, and resolve problems using the Python Programming Language and its features	The student is unable to write, compile, execute, troubleshoot, and resolve problems using the Python Programming Language and its features
Demonstrate Object Oriented Programming methodology in program development	The student is consistently able to demonstrate Object Oriented Programming methodology in program development	The student is basically able to demonstrate Object Oriented Programming methodology in program development, but may require some assistance	The student is not able to demonstrate Object Oriented Programming methodology in program development
Identify important Python ample libraries	The student is consistently able to identify important Python ample libraries	The student is generally able to identify important Python ample libraries	The student is unable to identify important Python ample libraries
Describe the fundamentals of Data Science	The student is able to describe the fundamentals of Data Science accurately and in detail	The student is able to describe the fundamentals of Data Science with some omissions or inaccuracies	The student is unable to describe the fundamentals of Data Science
Locate and use Help Resources	The student is consistently able to locate and use Help Resources	The student is generally able to locate and use Help Resources	The student is unable to locate and use Help Resources
Demonstrate implementation of a Graphical User Interface (GUI)	The student is consistently able to demonstrate implementation of a Graphical User Interface (GUI)	The student is generally able to demonstrate implementation of a Graphical User Interface (GUI)	The student is unable to demonstrate implementation of a Graphical User Interface (GUI)
Analyze and evaluate software application and development theory and concepts	The student is fully able to analyze and evaluate software application and development theory and concepts	The student is frequently able to analyze and evaluate software application and development theory and concepts	The student is unable to analyze and evaluate software application and development theory and concepts
Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions	The student is consistently able to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions	The student is, under most circumstances, able to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions	The student is unable to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions
Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline	The student is consistently able and prepared to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements	The student in most cases is able and prepared to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements	The student is not able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements
Identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems	The student is always able to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems	The student is occasionally able to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems, but not necessarily consistently	The student is unable to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems