# ITMO 356 RUBRIC

**ITMO 356 Introduction to Open Source Operating Systems**
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 & 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**<br>Upon completion of this course the student should be able to do the following: | | | |
| **Outcome** **Score ▶** | **5** | **3** | **1** |
| *Use and administer Linux as both a server and desktop operating system* | The student is consistently able to use and administer Linux as both as a server and as a desktop operating system | The student is generally able to use and administer Linux as both as a server and as a desktop operating system | The student is unable to use and administer Linux as either as a server or as a desktop operating system |
| *Describe the General Public License, GNU, and the history of the Linux operating system* | The student is able to describe the General Public License, GNU, and the history of the Linux operating system accurately & in detail | The student is able to describe the General Public License, GNU, and the history of the Linux operating system with some omissions or inaccuracies | The student is unable to describe the General Public License, GNU, or the history of the Linux operating system |
| *Install different Linux distributions with custom partitioning* | The student is able to install different Linux distributions with custom partitioning accurately and with no issues | The student is able to install different Linux distributions with custom partitioning with only minor issues or problems | The student is unable to install different Linux distributions with custom partitioning |
| *Navigate the Linux operating system using a graphical user interface* | The student is consistently able to navigate the Linux operating system using a graphical user interface with no issues | The student is normally able to navigate the Linux operating system using a graphical user interface with only minor issues | The student is unable to navigate the Linux operating system using a graphical user interface |
| *Navigate the Linux filesystem using the command line* | The student is consistently able to navigate the Linux filesystem using the command line with no issues | The student is normally able to navigate the Linux filesystem using the command line with only minor issues or problems | The student is unable to navigate the Linux filesystem using the command line |
| *Interact with the Linux shell* | The student is able to interact with the Linux shell with no issues | The student is able to interact with the Linux shell with only minor issues or problems | The student is unable to interact with the Linux shell |
| *Recall and use key Linux utilities* | The student is able to recall and use key Linux utilities with no issues | The student is able to recall and use key Linux utilities with only minor issues | The student is unable to recall and use key Linux utilities |
| *Install software for use with the Linux OS using apt, dpkg, dnf, snap, flatpak, and GUI tools* | The student is able to consistently install software for use with the Linux OS using apt, dpkg, dnf, snap, flatpak, and GUI tools with no issues | The student is able to install software for use with the Linux OS using apt, dpkg, dnf, snap, flatpak, and GUI tools with only minor issues or problems | The student is unable to install software for use with the Linux OS using apt, dpkg, dnf, snap, flatpak, or GUI tools |
| *Use networking services and troubleshoot network issues* | The student is able to use networking services and troubleshoot network issues without any problems | The student is able to use networking services and troubleshoot network issues with only minor problems | The student is unable to use networking services or troubleshoot network issues |
| *Use SSH for remote administration* | The student is able to use SSH for remote administration with no issues | The student is able to use SSH for remote administration with only minor issues | The student is unable to use SSH for remote administration |
| *Create custom host firewall rules* | The student is able to successfully create custom host firewall rules with no issues | The student is able to create custom host firewall rules with only minor issues | The student is unable to create custom host firewall rules |
| *Configure an Apache web server* | The student is able to configure an Apache web server with no issues | The student is able to configure an Apache web server with only minor issues | The student is unable to configure an Apache web server |
| *Create Linux shell scripts for use with system automation* | The student is able to create functional Linux shell scripts for use with system automation with no issues | The student is able to create Linux shell scripts for use with system automation with only minor issues | The student is unable to create Linux shell scripts for use with system automation |
| *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 unable 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 to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems |