

## Dominican University GSLIS Course Electives Forecasting System Security Policy

This security policy is intended to describe access control and system permissions for User Roles in the Dominican University GSLIS Course Electives Forecasting System (CEFS). The security policy will become part of the System Requirements Specification (SRS), and is intended for the system developers, GSLIS faculty project liaison, project managers, GSLIS student representative liaison, testers, and documentation writers.

The following tables are created for each of the main operational functions of the CEFS. Access control is shown for each User Role. Permissions are determined for the activity of creating, reading, updating, and deleting data for each operational function. For each role that has permission for the activity, an “X” is listed in the matrix. Blank cells are shown where permission is denied.

Table 1 shows Individual Forecasting, a main function performed by the Student User Role. In Table 1, the Student User has permission to create, read, update, and delete their individual forecasts. In addition, the Faculty User can read individual forecasts. A Faculty Advisor or other faculty member in a mentor role for students will need this access for student support. The Staff Administrator for the system also has read and delete permissions, as these permissions may be necessary to administrate the system.

Table 1: Individual Student Forecasts				
User Role	Create Forecast	Read Forecast	Update Forecast	Delete Forecast
System				
Student	X	X	X	X
Faculty		X		
Staff				
Staff Administrator		X		X

Table 2 shows the aggregated forecasts of student electives selections that have been compiled as an operation of the System. Therefore, the System as a User performs the operations that create and update this compiled forecast. Students have no role in the compilation, and therefore no permissions to this data. Faculty and Staff may read the compile forecasts. The Staff Administrator may also delete the compiled forecasts in case of problems or errors.

Table 2: Aggregate Student Forecasts				
User Role	Create Forecast	Read Forecast	Update Forecast	Delete Forecast
System	X		X	
Student				
Faculty		X		
Staff		X		
Staff Administrator		X		X

Table 3 shows the reports generated from aggregated forecasts of student electives selections. The reports are formatted by the Staff Administrator, which is the create permission. The system provides the data that updates the reports as the data changes during the time individual forecasts are added. Faculty, Staff, and the Staff Administrator may read all reports. The Staff Administrator may also update or delete any reports in case of problems or errors.

Aggregate Forecast Reports				
User Role	Create Reports	Read Reports	Update Reports	Delete Reports
System			X	
Student				
Faculty		X		
Staff		X		
Staff Administrator	X	X	X	X

The final access control is around system configuration variables that are defined to run the system during each forecasting window. These variables are items such as the open period (time frame during which individual forecasting is available to students). The System Administrator has the permission for each activity in this function. For information purposes, the Faculty and Staff Users have read permission to this activity. The system needs to read this information to process and perform its operations.

Configure System Variable Input				
User Role	Create Input	Read Input	Update Input	Delete Input
System		X		
Student				
Faculty		X		
Staff		X		
Staff Administrator	X	X	X	X