

USER MANUAL

DEVELOPMENT OF AN ATTENDANCE MONITORING SYSTEM WITH A PORTABLE RFID-BASED LOGGING DEVICE

2023

—

**Amber Brinette Lim
Kathryn Marie Sigaya
Justin Stuart Hipolito**

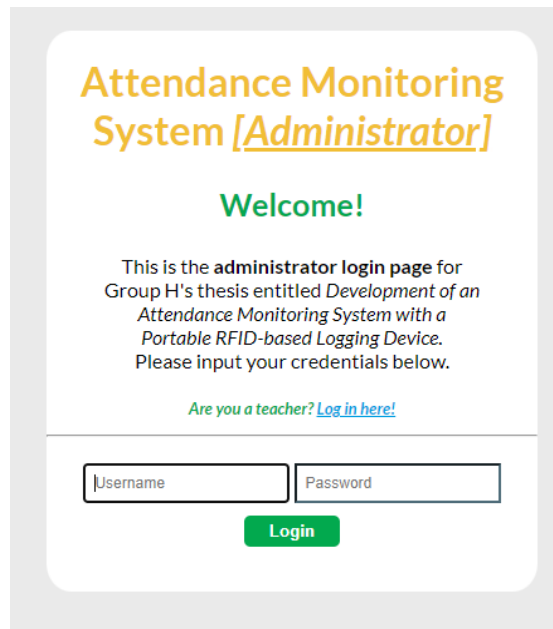
TABLE OF CONTENTS

USER MANUAL.....	1
TABLE OF CONTENTS	2
FOR ADMINISTRATORS.....	3
Creating an Account	3
Changing Account Passwords	5
Dropping and Exporting Teacher Databases	7
Viewing Teacher Attendance	9
FOR TEACHERS: A Guide to Using the Attendance Logging and Monitoring System	11
Uploading Class Lists	11
Taking Attendance	14
Teacher Enrollment	14
Class Attendance	15
Student Enrollment	17
Attendance Taking	18
School Event	19
Monitoring Attendance	20
Attendance Monitoring	20
Overall Attendance	21
Class List	21
Date Filter	22
Unenrolled RFIDs	22
Modifying Attendance Status	23
Exporting	23
Changing Password	24
Logging out	24
TO CANVAS: Linking the Web Application to your Course	25
External App	25
External URL	27

FOR ADMINISTRATORS

Creating an Account

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.



The screenshot shows the login interface for the Attendance Monitoring System Administrator. At the top, the title "Attendance Monitoring System [Administrator]" is displayed in orange. Below it, a green "Welcome!" message is shown. A paragraph of text explains that this is the administrator login page for Group H's thesis and requests credentials. A link "Are you a teacher? Log in here!" is provided. At the bottom, there are input fields for "Username" and "Password", followed by a green "Login" button.

Attendance Monitoring System [Administrator]

Welcome!

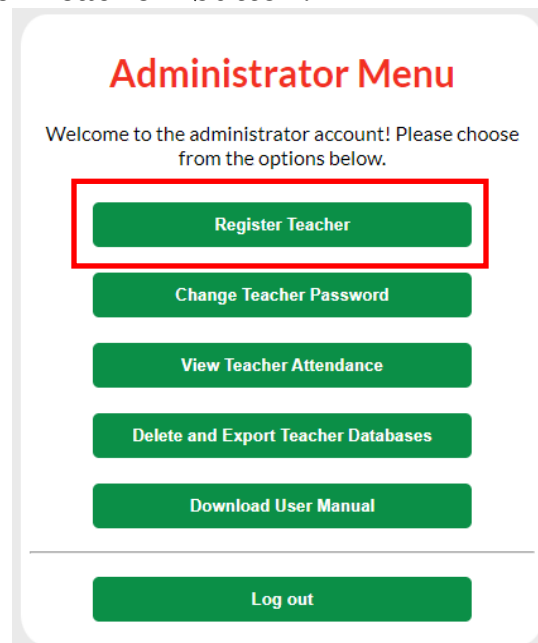
This is the **administrator login page** for Group H's thesis entitled *Development of an Attendance Monitoring System with a Portable RFID-based Logging Device*. Please input your credentials below.

Are you a teacher? [Log in here!](#)

Username Password

Login

3. Select the "Register Teacher" button.



The screenshot shows the Administrator Menu. It starts with a red title "Administrator Menu". Below it, a welcome message asks the user to choose from the options. A list of green buttons is shown: "Register Teacher", "Change Teacher Password", "View Teacher Attendance", "Delete and Export Teacher Databases", and "Download User Manual". At the bottom, there is a "Log out" button. The "Register Teacher" button is highlighted with a red rectangular box.

Administrator Menu

Welcome to the administrator account! Please choose from the options below.

Register Teacher

Change Teacher Password

View Teacher Attendance

Delete and Export Teacher Databases

Download User Manual

Log out

4. Fill out all the necessary information.
5. Click the “Register” button.

Register Teacher

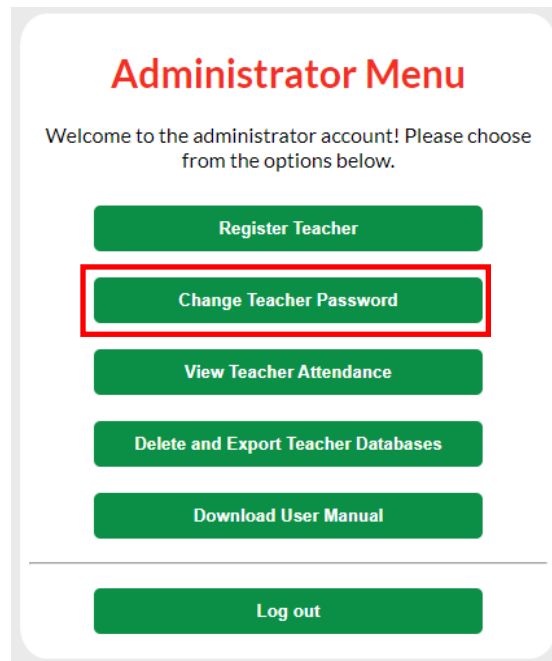
Fill up all the text fields below for registering the teacher into the Attendance Monitoring System.
*A randomly generated password will be sent to the teacher's email address after clicking the **Register** button.*

FIRST NAME	<input type="text" value="Kathryn Marie"/>
LAST NAME	<input type="text" value="Sigaya"/>
ID NUMBER	<input type="text" value="19102579"/>
EMAIL	<input type="text" value="19102579@usc.edu.ph"/>
<div>Register</div>	

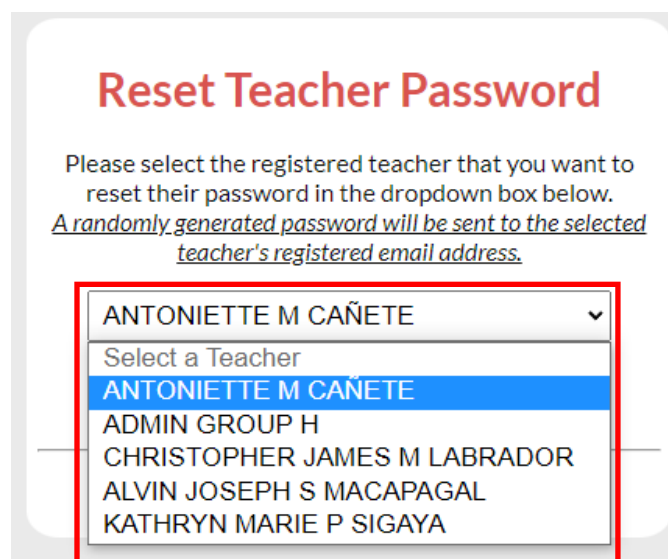
Return to Administrator Menu

Changing Account Passwords

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.
3. Select the “Change Teacher Password” Option on the Administrator menu.



4. Select the teacher whose password you would like to change.



5. Click the “Reset Teacher Password” button.

Reset Teacher Password

Please select the registered teacher that you want to reset their password in the dropdown box below.
A randomly generated password will be sent to the selected teacher's registered email address.

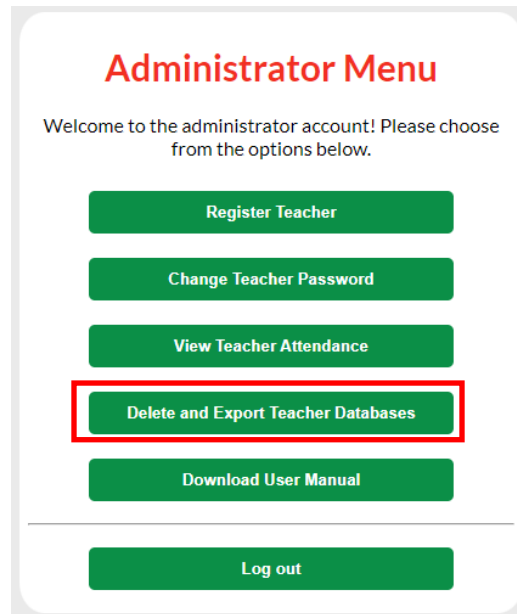
ANTONIETTE M CAÑETE ▼

Reset Teacher Password

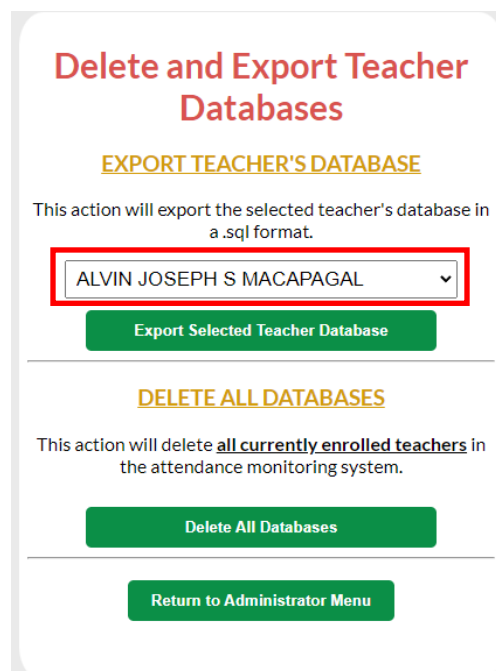
Return to Administrator Menu

Dropping and Exporting Teacher Databases

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.
3. Select the “Delete and Export Teacher Databases” Button.



4. For exporting a registered teacher's database, select the teacher at the dropdown menu.



5. Click the “Export Selected Teacher Database” button.

Delete and Export Teacher Databases

EXPORT TEACHER'S DATABASE

This action will export the selected teacher's database in a .sql format.

ALVIN JOSEPH S MACAPAGAL ▼

Export Selected Teacher Database

DELETE ALL DATABASES

This action will delete all currently enrolled teachers in the attendance monitoring system.

Delete All Databases

Return to Administrator Menu

6. For deleting all registered teachers' databases in the web application, click “Delete All Databases” button.

Delete and Export Teacher Databases

EXPORT TEACHER'S DATABASE

This action will export the selected teacher's database in a .sql format.

ALVIN JOSEPH S MACAPAGAL ▼

Export Selected Teacher Database

DELETE ALL DATABASES

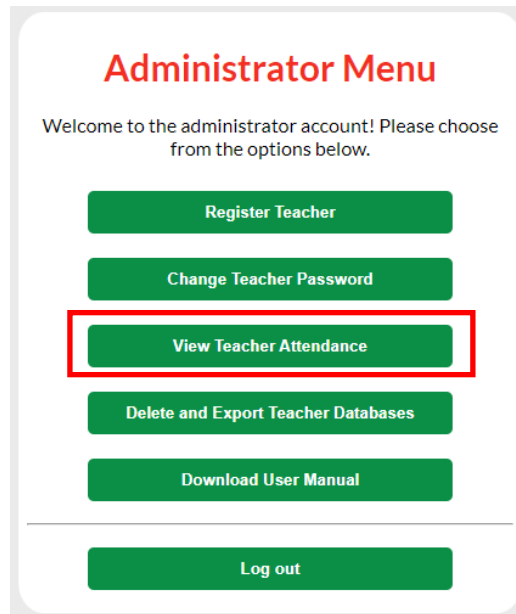
This action will delete all currently enrolled teachers in the attendance monitoring system.

Delete All Databases

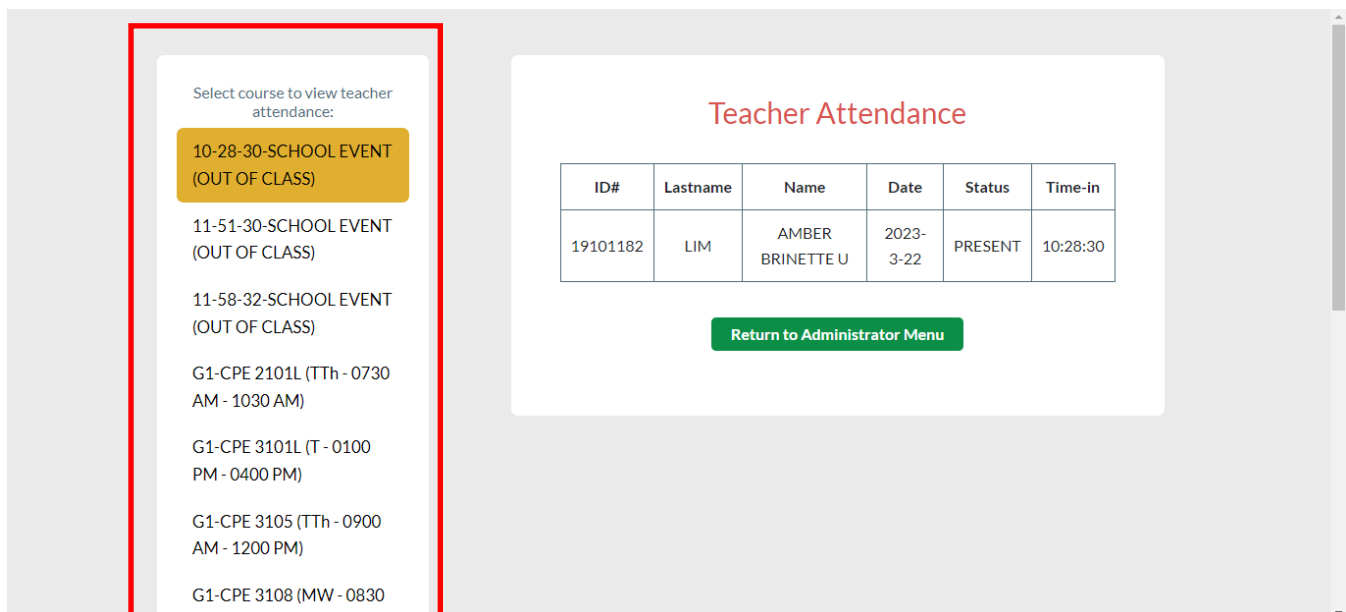
Return to Administrator Menu

Viewing Teacher Attendance

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.
3. Click the “View Teacher Attendance” button.



4. Select the class you wish to check the teacher’s attendance of via the left side bar.



5. The teacher's attendance for the selected class (yellow highlighted) will be displayed on the right side of the screen.

Select course to view teacher attendance.

10-28-30-SCHOOL EVENT (OUT OF CLASS)

11-51-30-SCHOOL EVENT (OUT OF CLASS)

11-58-32-SCHOOL EVENT (OUT OF CLASS)

G1-CPE 2101L (TTh - 0730 AM - 1030 AM)

G1-CPE 3101L (T - 0100 PM - 0400 PM)

G1-CPE 3105 (TTh - 0900 AM - 1200 PM)

G1-CPE 3108 (MW - 0830 AM - 1000 AM)

Teacher Attendance

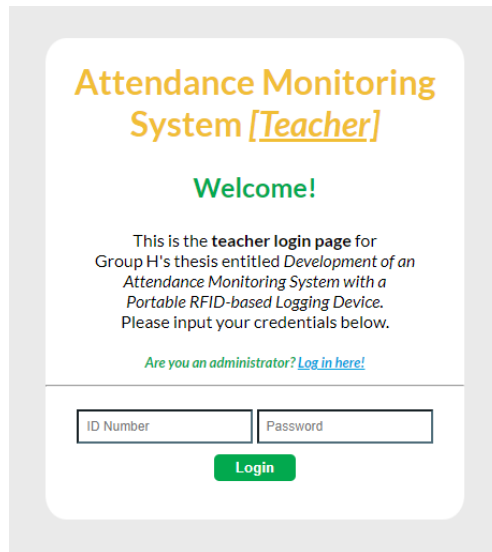
ID#	Lastname	Name	Date	Status	Time-in
19101182	LIM	AMBER BRINETTE U	2023-3-22	PRESENT	10:28:30

Return to Administrator Menu

FOR TEACHERS: A Guide to Using the Attendance Logging and Monitoring System

Uploading Class Lists

1. Access the web application using a browser on the local server.
2. Log in to the user account using the credentials given by the administrator.



The screenshot shows a web application interface for the Attendance Monitoring System, specifically the Teacher login page. The title is "Attendance Monitoring System [Teacher]" in orange. Below it is a green "Welcome!" message. A paragraph of text states: "This is the teacher login page for Group H's thesis entitled *Development of an Attendance Monitoring System with a Portable RFID-based Logging Device*. Please input your credentials below." There is a link for administrators: "Are you an administrator? [Log in here!](#)". At the bottom, there are two input fields labeled "ID Number" and "Password", and a green "Login" button.

3. Click on “Upload Class Lists” found on the top navigation bar.



4. Click on “Browse” and upload a .CSV file of your desired class list (NOTE: the class list must be exported directly from USC ISMIS.)

Upload Class Lists

Upload your class list file that is in **CSV** format.

Select the team teach partner for this particular class:

NOT A TEAM TEACH CLASS ▼

Browse

5. Select whether the class is handled individually or as a team teach class via the dropdown menu.

Upload Class Lists

Upload your class list file that is in **CSV** format.

Select the team teach partner for this particular class:

NOT A TEAM TEACH CLASS ▼
NOT A TEAM TEACH CLASS
ANTONIETTE M CAÑETE
ADMIN GROUP H
ALVIN JOSEPH S MACAPAGAL
KATHRYN MARIE P SIGAYA

Browse

- Set your personal configurations for the attendance logging process to be done on the portable device.

Set Personal Configurations

This is where you will configure your uploaded class list settings for the Attendance Logging System to use. A CSV file containing the settings will be generated in the system after you click the [Upload Class List](#) and [Set Configurations](#) button below.

MARK TEACHER ATTENDANCE This is where your personal attendance is marked based on <u>the time of your class</u> .	<input type="text" value="YES"/> The default selection for this setting is <u>YES</u> . This setting cannot be changed.
TEACHER LATE If MARK TEACHER is set as YES, what time would you be marked LATE? The time is set in minutes.	<input type="text" value="10"/> The default time for this setting is <u>10</u> minutes.
TEACHER ABSENT If MARK TEACHER is set as YES, what time would you be marked ABSENT? The time is set in minutes.	<input type="text" value="15"/> The default time for this setting is <u>15</u> minutes.
BASE STUDENT ATTENDANCE ON TEACHER TAP If you would like your students' attendance status (PRESENT, LATE, ABSENT) to be based on the class start time, input NO. If you want their attendance to be based on your initial ID tap on the device, input YES.	<input type="text" value="YES"/> The default selection for this setting is <u>YES</u> .
STUDENT LATE How many minutes from the start of attendance until the student is marked as <u>LATE</u> ? The time is set in minutes.	<input type="text" value="15"/> The default time for this setting is <u>15</u> minutes.
STUDENT ABSENT How many minutes from the start of attendance until the student is marked as <u>ABSENT</u> ? The time is set in minutes.	<input type="text" value="30"/> The default time for this setting is <u>30</u> minutes.

Upload Class List and Set Configurations

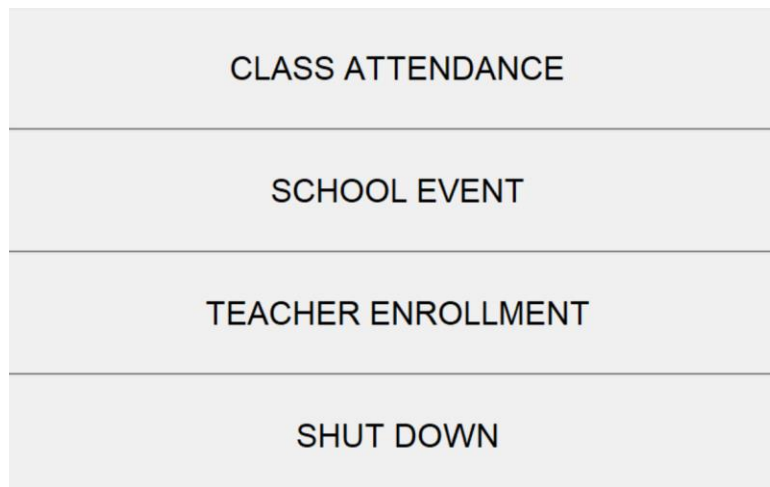
- Select the “Upload Class List and Set Configurations” button at the bottom of the page to complete the process.

Upload Class List and Set Configurations

Taking Attendance

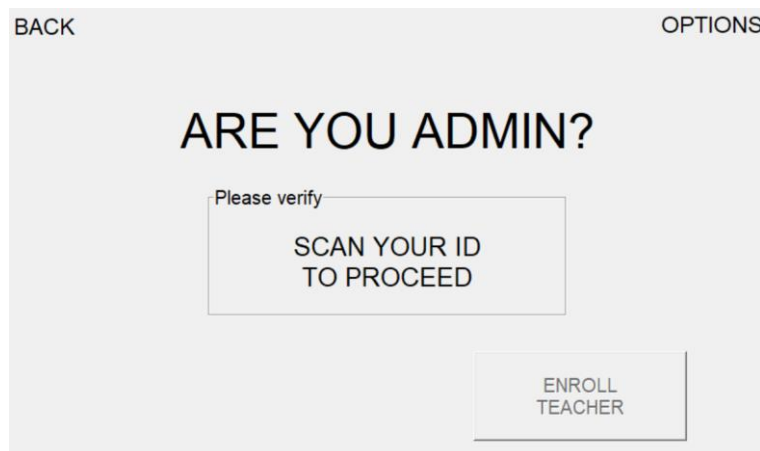
(Note: Make sure that both the local server and the portable device are turned on and connected to the internet to ensure the synchronization of necessary files for the attendance taking process.)

1. Turn on both switches found at the side of the portable device.
2. Wait for the device to boot.
3. Select the operation you wish to perform.

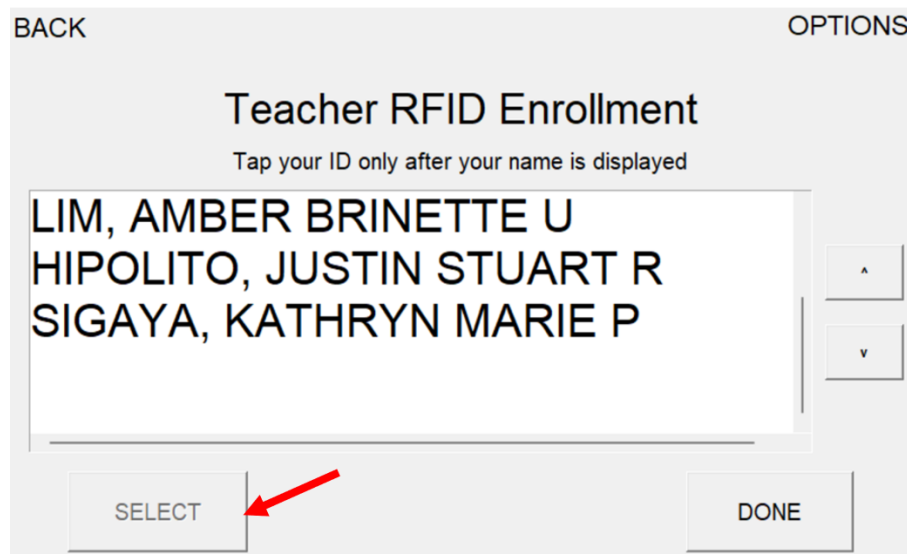


Teacher Enrollment

1. The administrator must tap their USC ID on the scanner found on the right side of the LCD screen to begin teacher enrollment.



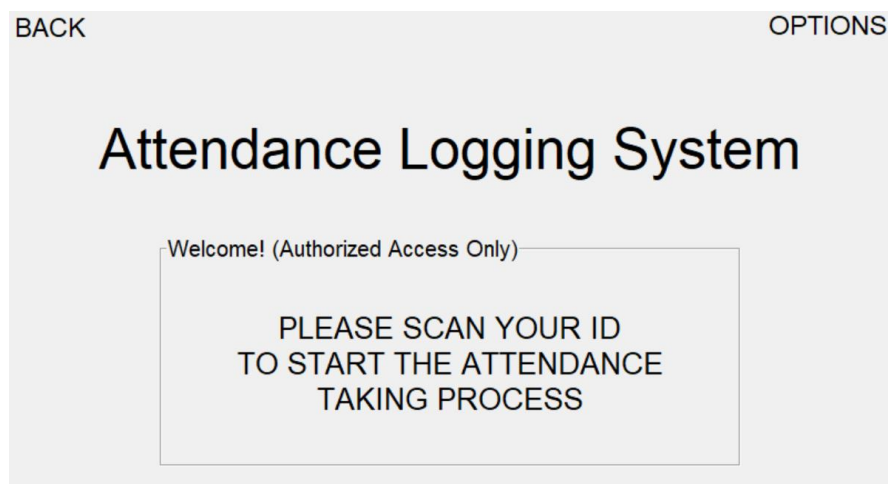
2. After clicking “Enroll Teacher”, select the name of the teacher you wish to enroll into the database and click on the button found on the lower left corner of the screen. The text will change to “Scan” or “Overwrite” depending on whether the teacher’s ID has already been enrolled or not.



3. When the enrollment of teachers is finished, select “Done”.

Class Attendance

1. The screen will display a prompt for authorized users to tap their ID on the scanner.



2. Select the class you wish to take attendance of. Else, select the “Substitute Teacher” option.

A screenshot of a user interface with a light gray background. At the top left is the text "BACK" and at the top right is "OPTIONS". In the center, the text "HELLO USER" is displayed above "Please select your class:". Below this is a list box containing three items: "CPE TEST_G1_T - 0100 PM - 0400", "CPE TEST_G2_Th - 0130 PM - 0430", and "CPE TEST_G3_MWF- 0730 PM - 0800". To the right of the list box are two small buttons with upward and downward arrows. Below the list box is a button labeled "SUBSTITUTE TEACHER".

3. If not a substitute teacher, skip to Step 4. Else, select the teacher you wish to substitute. After selecting the teacher, go back to Step 2.

A screenshot of a user interface with a light gray background. At the top left is the text "BACK" and at the top right is "OPTIONS". In the center, the text "HELLO USER" is displayed above "Please select who you are substituting:". Below this is a list box containing three items: "LIM, AMBER BRINETTE U", "HIPOLITO, JUSTIN STUART R", and "SIGAYA, KATHRYN MARIE P". To the right of the list box are two small buttons with upward and downward arrows.

4. Verify the details of the class selected and select either “Student Enrollment” or “Attendance Taking”.

BACK OPTIONS

Please verify your selection:

COURSE CODE: CPE TEST
GROUP: G3
SCHEDULE: MWF- 0730 PM - 0830 PM

STUDENT ENROLLMENT ATTENDANCE TAKING

Student Enrollment

5. Select the name of the student you wish to enroll into the database and click on the button found on the lower left corner of the screen. The text will change to “Scan” or “Overwrite” depending on whether the student’s ID has already been enrolled or not.
6. Repeat Step 5 until all students are enrolled.
7. The “Create Attendance Log” option allows the user to generate an attendance log file based on the student's enrollment process. If an attendance log is not needed, click “Done”.

BACK OPTIONS

Student RFID Enrollment

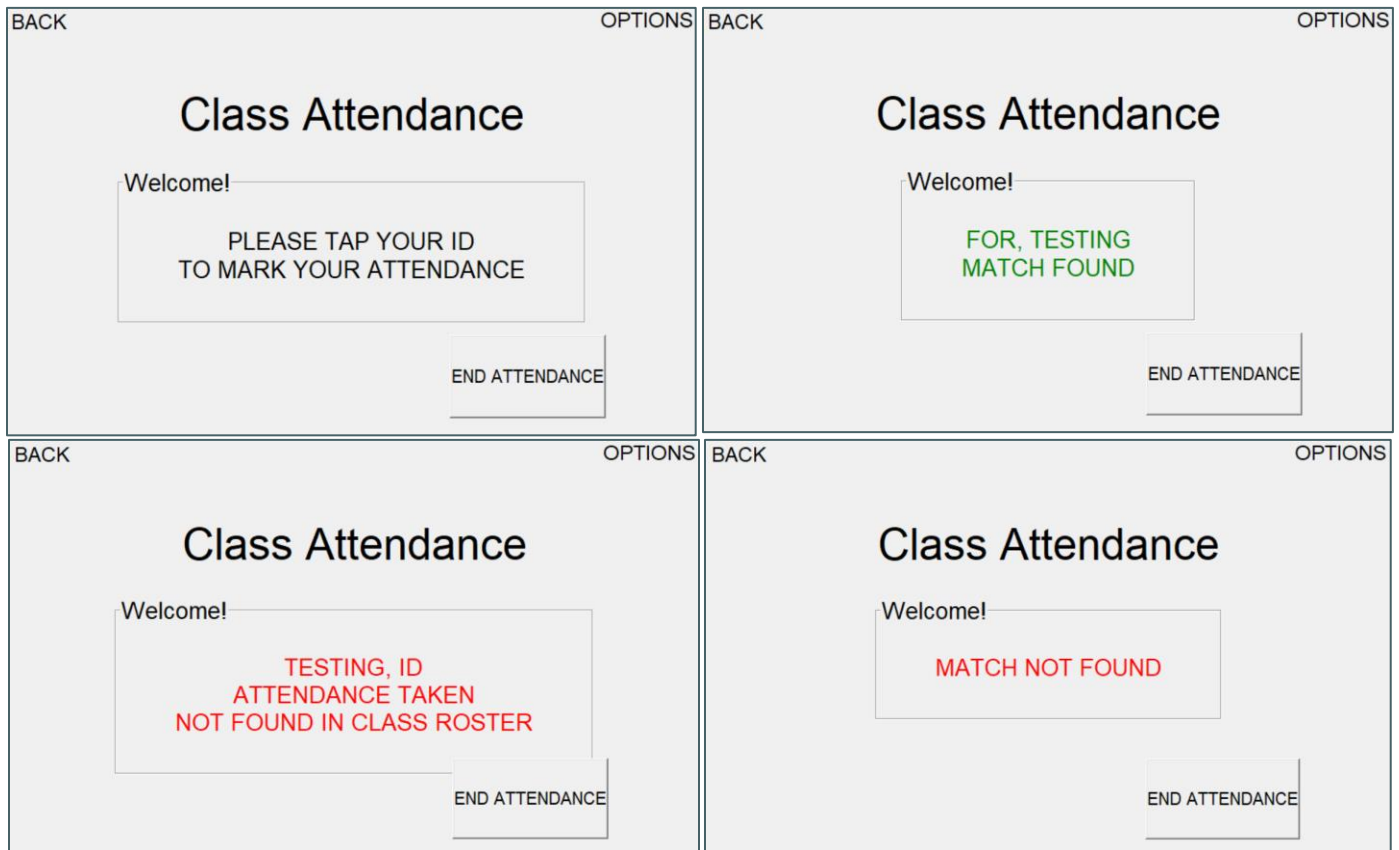
Tap your ID only after your name is displayed

FOR, TESTING
DUMMY ID, TEST
MOCK, TRIAL
TESTING, ID

SELECT CREATE ATTENDANCE LOG DONE

Attendance Taking

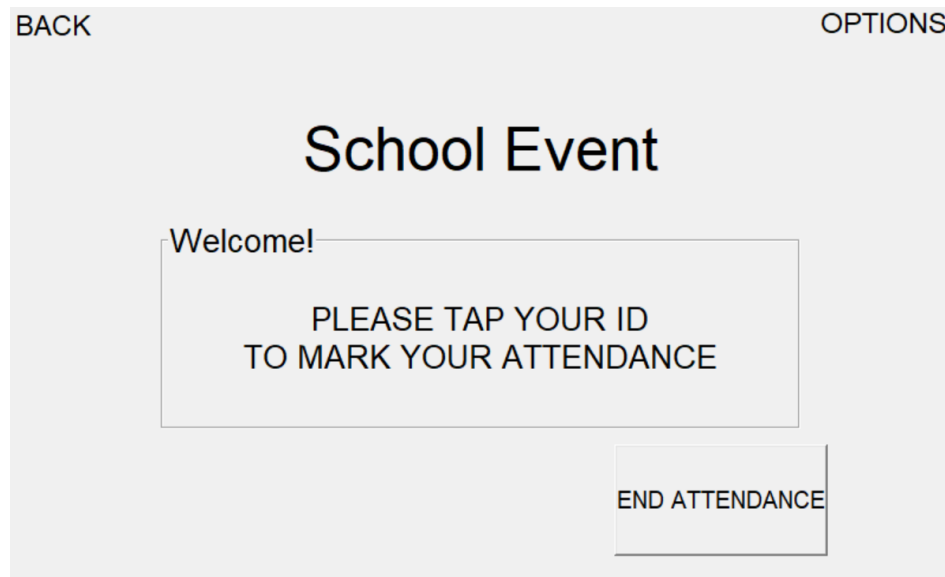
8. Allow students to tap their ID on the scanner to begin the attendance taking process. The display will change momentarily to indicate the detection of the student's ID.



9. Repeat Step 5 until all students have scanned.
10. The final attendance log files will be created once the “End Attendance” button has been clicked. Otherwise, the class will automatically end based on the official end time of the class.

School Event

1. The screen will display a prompt for authorized users to tap their ID on the scanner.
2. Once verified, students can begin tapping their IDs on the device for attendance taking.



3. Repeat Step 2 until all students have scanned.
4. Clicking the “End Attendance” button will stop the attendance taking process and create the attendance log file for the school event.

Monitoring Attendance

Attendance Monitoring

1. Access the web application using a browser on the local server.
2. Log in to the user account using the credentials given by the administrator.
3. Select the class whose attendance you would like to monitor.

Welcome, CHRISTOPHER JAMES M LABRADOR! Upload Class Lists Change Password Download User Manual Log Out

SELECT THE CLASS YOU WANT TO MONITOR:

G1-CPE 3105 (TTH - 0900 AM - 1200 PM)

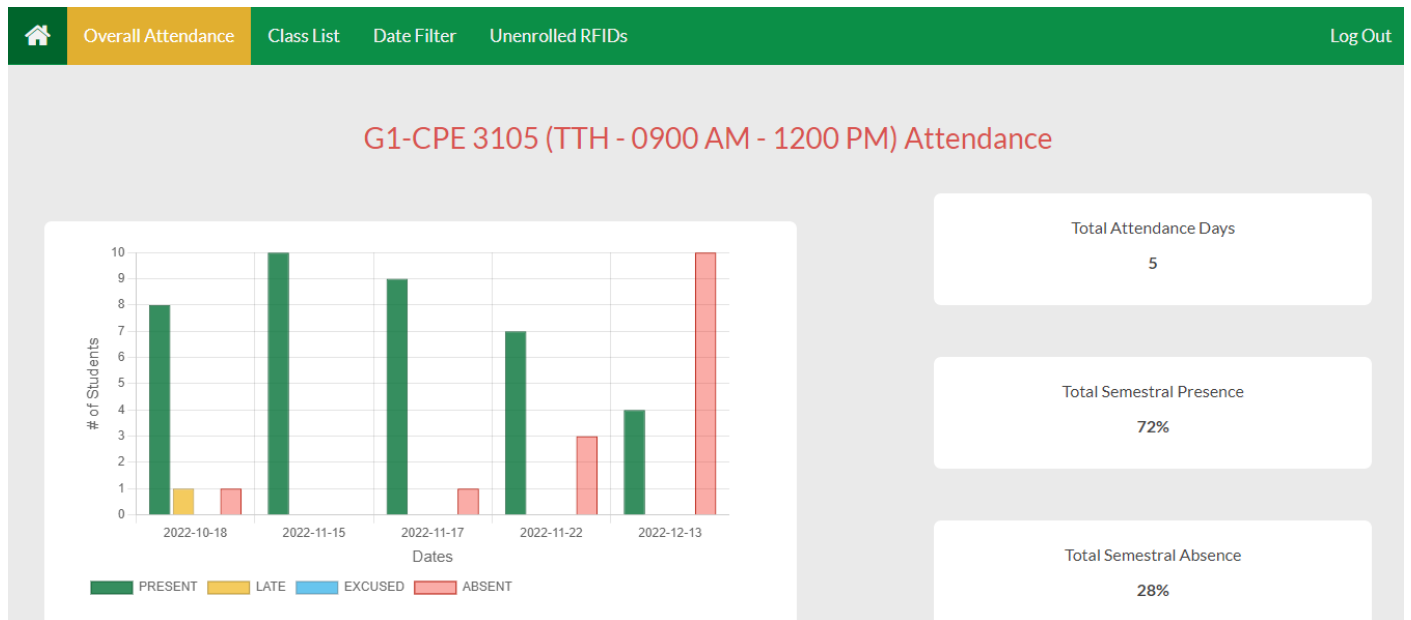
G1-CPE 71N (TH - 0430 PM - 0730 PM)

G2-CPE 3105 (TTH - 0100 PM - 0400 PM)

G5-CPE 3105 (MW - 0130 PM - 0430 PM)

Overall Attendance

- To have an overview of the attendance taken from the start to present, select “Overall Attendance” on the top navigation bar.



Class List

- The “Class List” option displays the list of students belonging to the selected class. Individual student monitoring can be done if you click on the name found on the list.

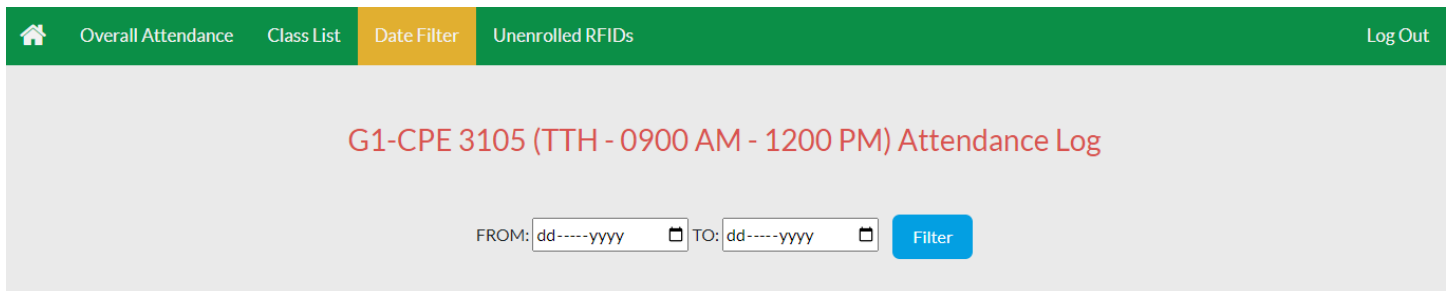
G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance Log

Export (Summary) Export (Detailed)

Name
ABELLA, VINCENT DOMINGUITO
ANGELES, BEA MONICA AMADORON
BAJAN, ZVI CINCO
CARANO-O, CYRUS NOEL MONTEMAYOR
COMENDADOR, ZAIR LEORICH JUGALBOT
DECIERDO, CHRISTIAN CLYDE GARCIANO
DEGUPO, MAYNARD CARANO O

Date Filter

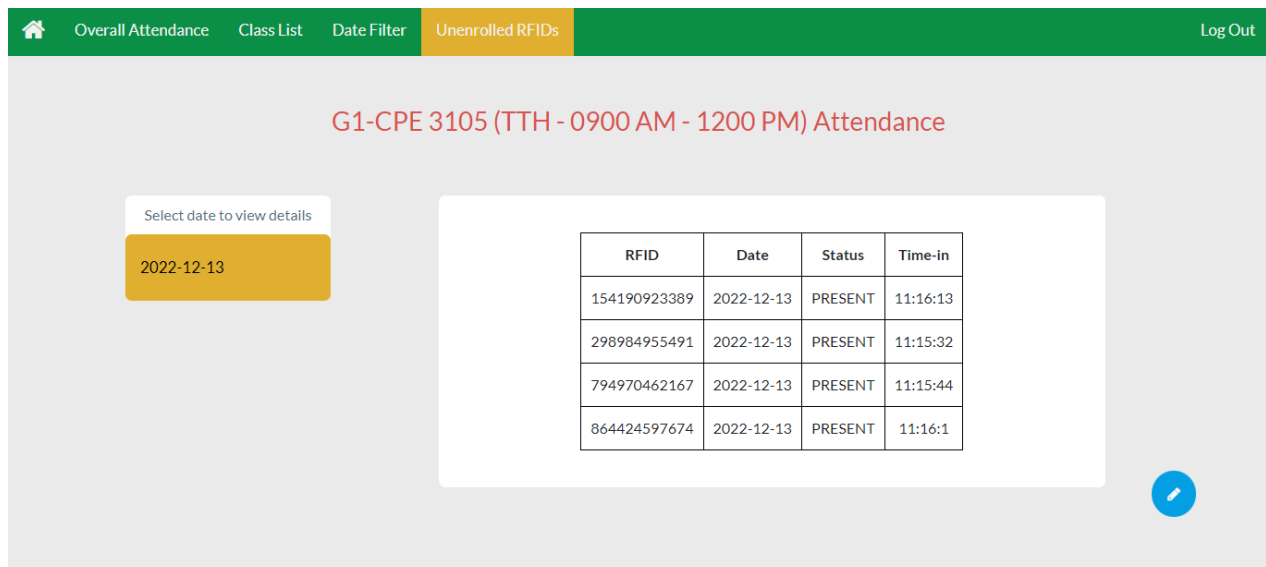
- The “Date Filter” option allows the user to filter out the attendance days based on a range of selected dates.



The screenshot shows the 'Date Filter' tab selected in the navigation bar. The main heading is 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance Log'. Below this, there is a 'FROM' date field with a calendar icon, a 'TO' date field with a calendar icon, and a blue 'Filter' button.

Unenrolled RFIDs

- The “Unenrolled RFIDs” option displays the list of students who tapped their IDs on the device during attendance taking, but whose RFIDs were not enrolled into the database.
- The user can update the unknown RFID tags using the edit button found on the lower right portion of the screen.
- To edit, the user needs to select the RFID and input the necessary details (ID number, surname, and name) in order to modify the data stored in the database.

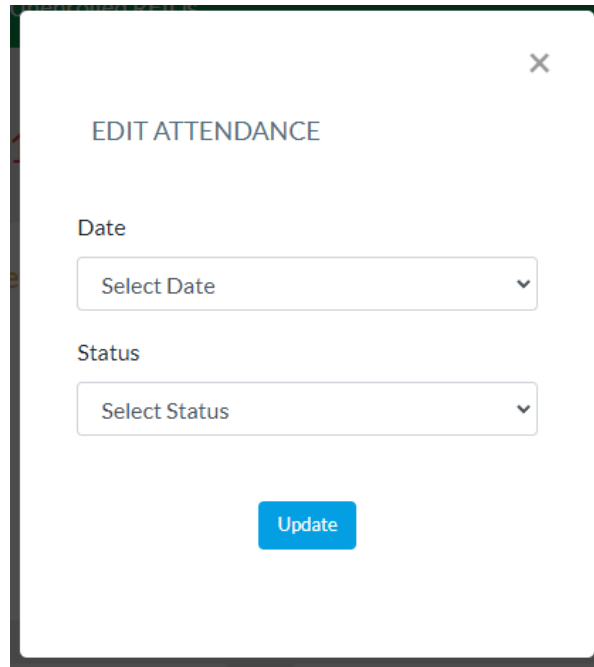


The screenshot shows the 'Unenrolled RFIDs' tab selected in the navigation bar. The main heading is 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance'. On the left, there is a 'Select date to view details' dropdown menu with '2022-12-13' selected. To the right, there is a table displaying attendance data for that date. A blue edit button is located at the bottom right of the table area.

RFID	Date	Status	Time-in
154190923389	2022-12-13	PRESENT	11:16:13
298984955491	2022-12-13	PRESENT	11:15:32
794970462167	2022-12-13	PRESENT	11:15:44
864424597674	2022-12-13	PRESENT	11:16:1

Modifying Attendance Status

1. Navigate to the “Class List” page and select the student of your choice.
2. Click on the edit button found on the lower right portion of the screen.
3. Pick the date of attendance and select the new attendance status that you want to modify the previous one into. There are 4 options to be chosen from: present, late, excused, and absent.

A screenshot of a web application modal titled "EDIT ATTENDANCE". The modal has a close button (X) in the top right corner. It contains two dropdown menus: "Date" with the placeholder text "Select Date" and "Status" with the placeholder text "Select Status". Below these dropdowns is a blue button labeled "Update".

Exporting

(Note: The exporting option is available in 3 pages: Class List, Date Filter, and in the individual student monitoring page.)

1. To export, click on the “Export” button. The reports generated can either be a summarized or detailed version, depending on the user’s choice.
2. At the bottom of a pop-up window, the user can decide to send the generated report via email or through local download.

×

19102579@usc.edu.ph

Send

Download

- # Changing Password

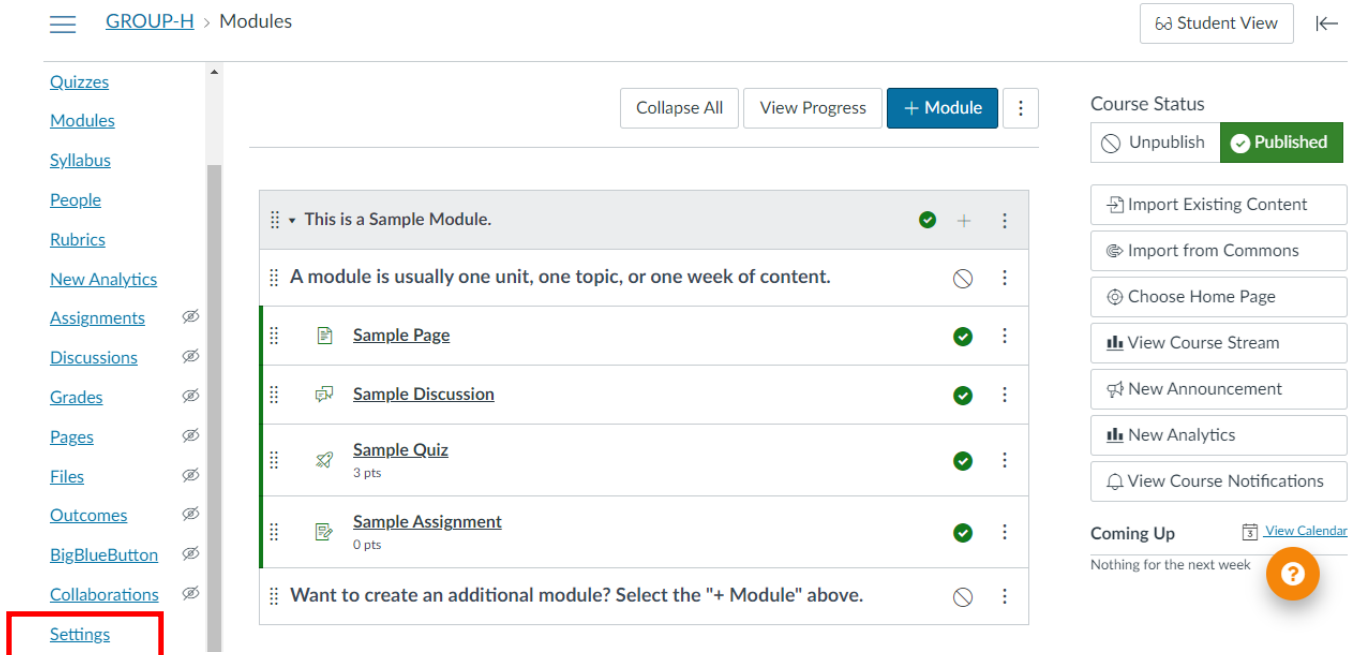
- ## Logging out

- # USER MANUAL

TO CANVAS: Linking the Web Application to your Course

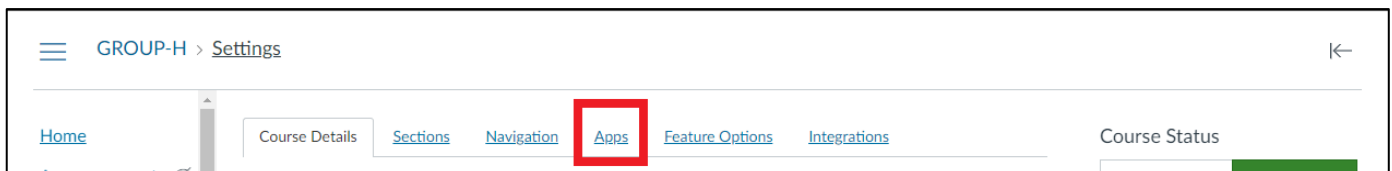
External App

1. To make the Web Application appear on the selection tab of your course, first select the “Settings” tab in said course.



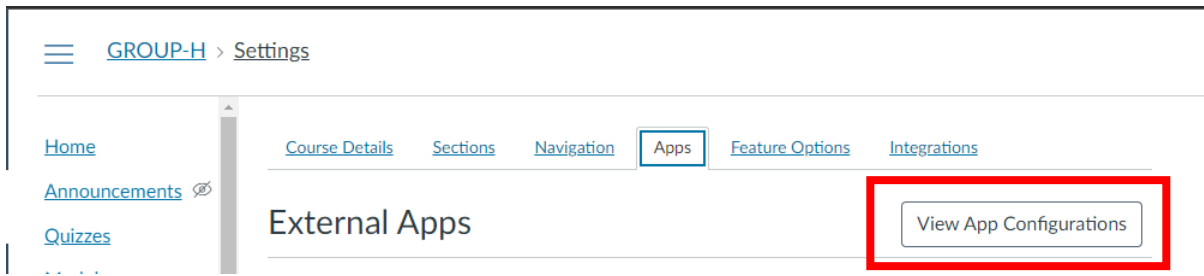
The screenshot shows the Canvas LMS interface for a course named "GROUP-H". The "Modules" tab is selected, displaying a list of modules. The left sidebar contains various course navigation links, with "Settings" highlighted by a red box. The main content area shows a list of modules, including "This is a Sample Module.", "A module is usually one unit, one topic, or one week of content.", "Sample Page", "Sample Discussion", "Sample Quiz", and "Sample Assignment". The right sidebar shows the "Course Status" section with "Published" selected, and a "Coming Up" section with a "View Calendar" link.

2. Select “App” tab inside Settings.

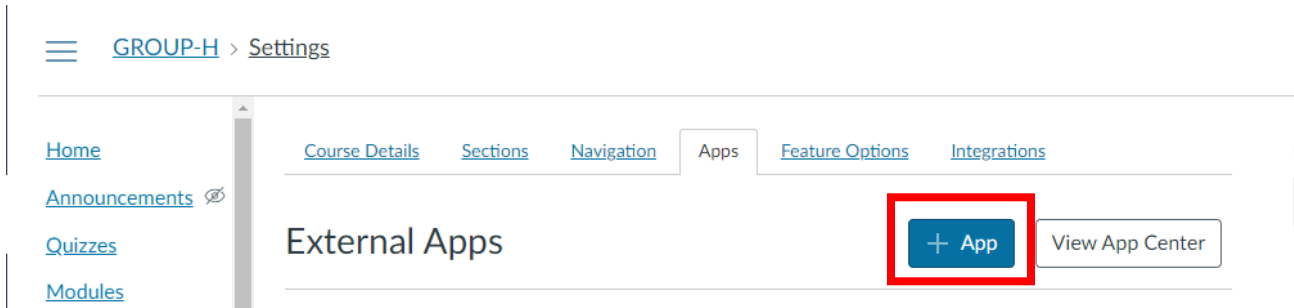


The screenshot shows the Canvas LMS interface for the same course, "GROUP-H", but now the "Settings" tab is selected. The top navigation bar contains several tabs: "Course Details", "Sections", "Navigation", "Apps", "Feature Options", and "Integrations". The "Apps" tab is highlighted with a red box. The right sidebar shows the "Course Status" section with "Published" selected.

3. Select “View App Configurations”.



4. Click “+ App”.



5. Fill out the boxes shown below and submit.

Add App

Configuration Type

Manual Entry

Name

Attendance Monitoring System

Consumer Key

secret

Shared Secret

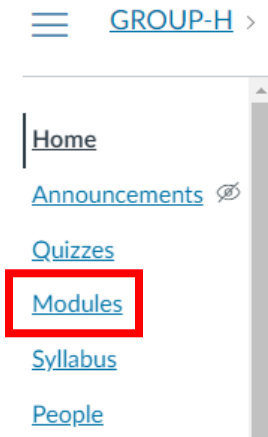
secret

Launch URL

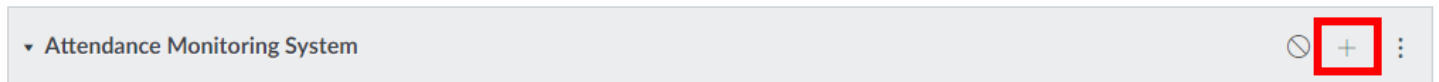
http://localhost/teacher-login.php

External URL

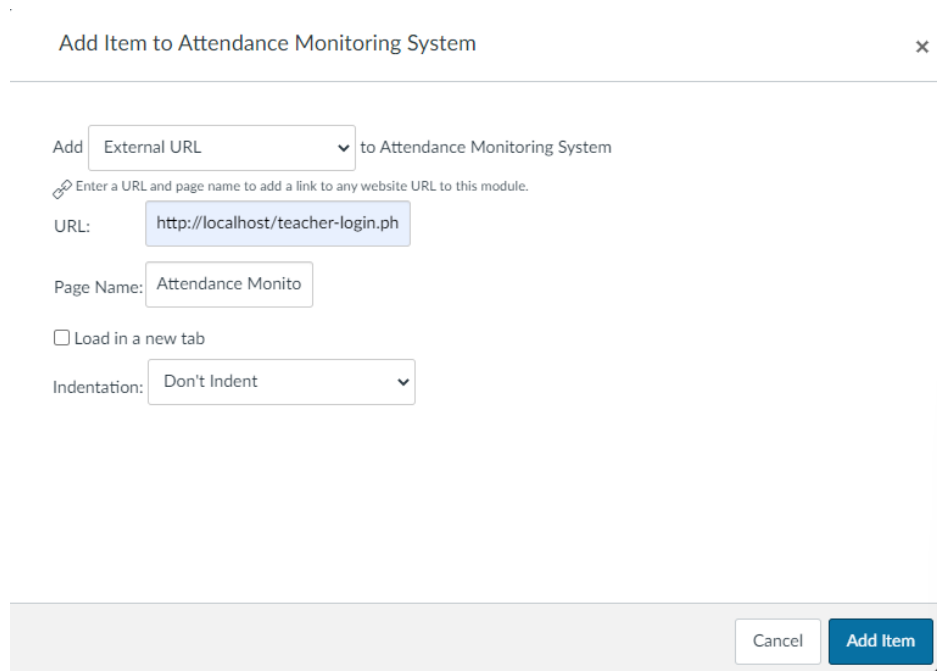
1. Select the “Modules” tab in your course.



2. Select the “+” button.



3. Fill out the boxes shown below and click “Add Item”.

A screenshot of a dialog box titled 'Add Item to Attendance Monitoring System'. The dialog has a close button (x) in the top right corner. Inside, it says 'Add External URL to Attendance Monitoring System'. Below this is a small icon and the text 'Enter a URL and page name to add a link to any website URL to this module.' There are two input fields: 'URL:' with the value 'http://localhost/teacher-login.ph' and 'Page Name:' with the value 'Attendance Monito'. Below these is a checkbox labeled 'Load in a new tab' which is unchecked. At the bottom is an 'Indentation:' dropdown menu with 'Don't Indent' selected. At the very bottom of the dialog are two buttons: 'Cancel' and 'Add Item'.