

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**

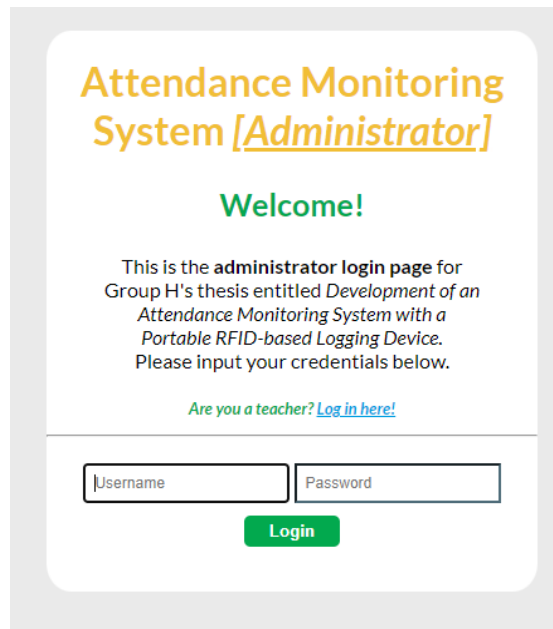
TABLE OF CONTENTS

USER MANUAL.....	1
TABLE OF CONTENTS	2
FOR ADMINISTRATORS.....	3
Creating an Account	3
Changing Account Passwords	5
Deleting 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	24
Changing Password	24
Logging out	25
TO CANVAS: Linking the Web Application to your Course	26
External App	26
External URL	28

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!

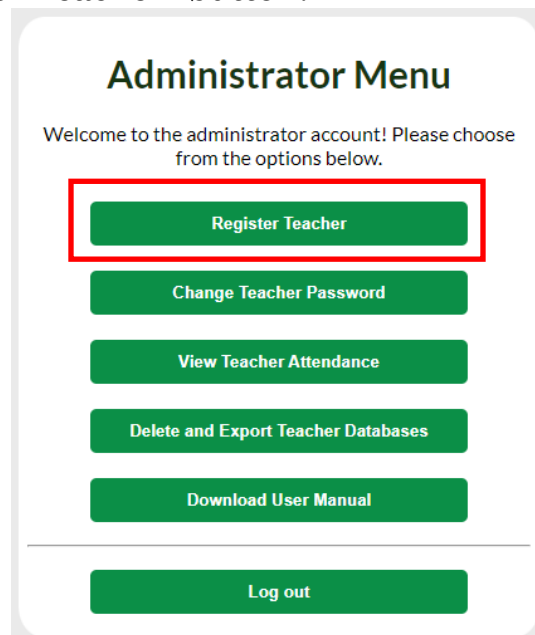
This is the **administrator login page** for Group H's thesis entitled *Development of an Attendance Monitoring System with a Portable RFID-based Logging Device*. Please input your credentials below.

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 welcome message and a prompt to choose from options. A list of green buttons is displayed: "Register Teacher", "Change Teacher Password", "View Teacher Attendance", "Delete and Export Teacher Databases", "Download User Manual", and "Log out". 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

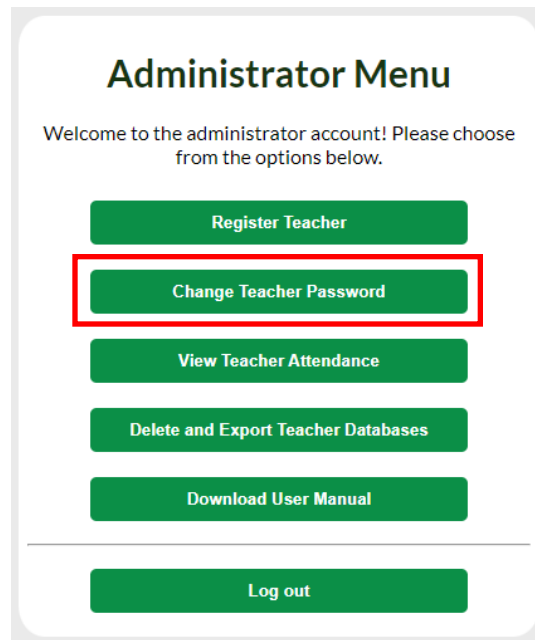
Fill up all the text fields below for registering the teacher into the Attendance Monitoring System.
*A randomly generated password will be sent to the teacher's email address after clicking the **Register** button.*

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>	

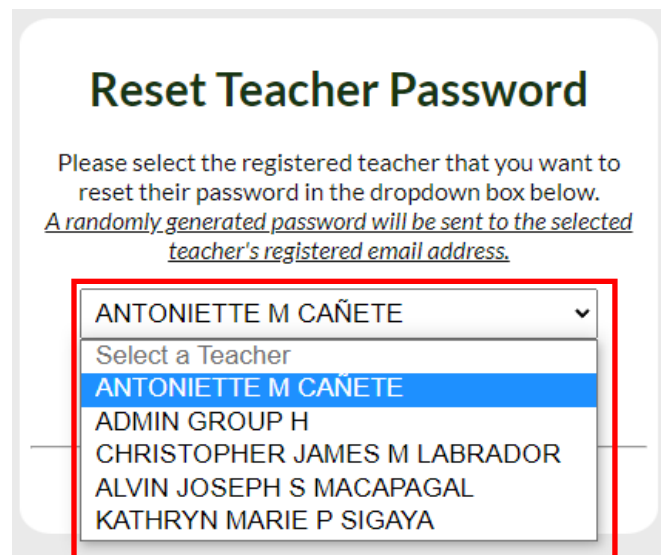
Return to Administrator Menu

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.

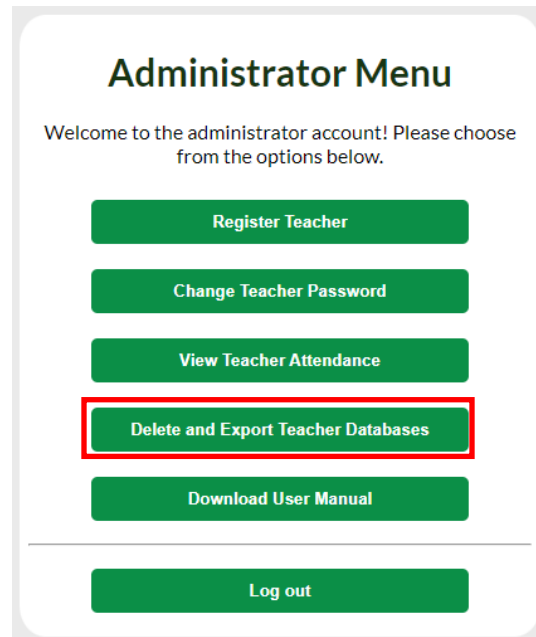
ANTONIETTE M CAÑETE ▼

Reset Teacher Password

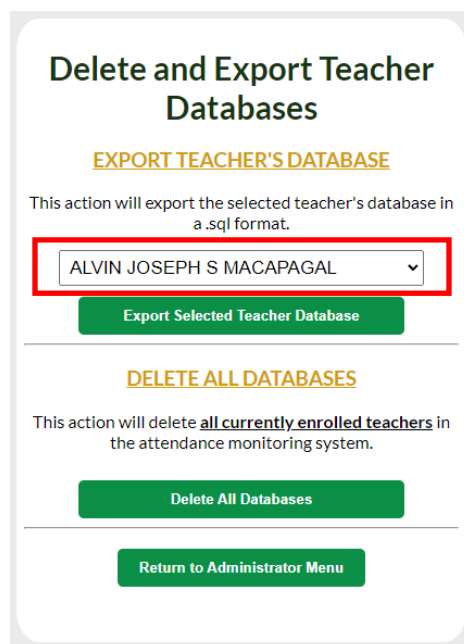
Return to Administrator Menu

Deleting 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

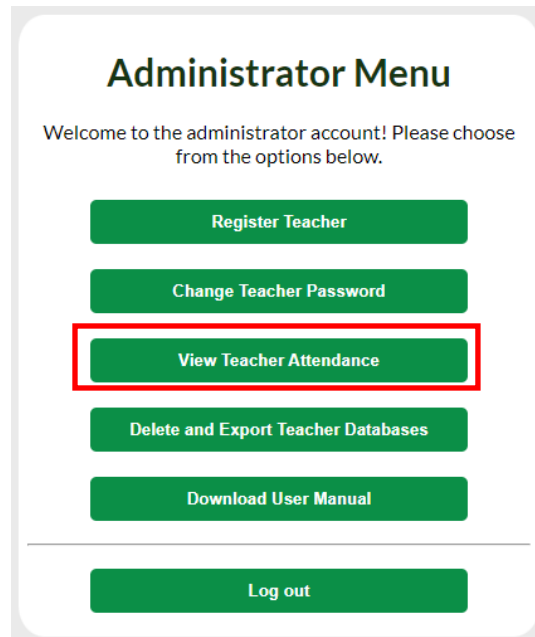
This action will delete all currently enrolled teachers in the attendance monitoring system.

Delete All Databases

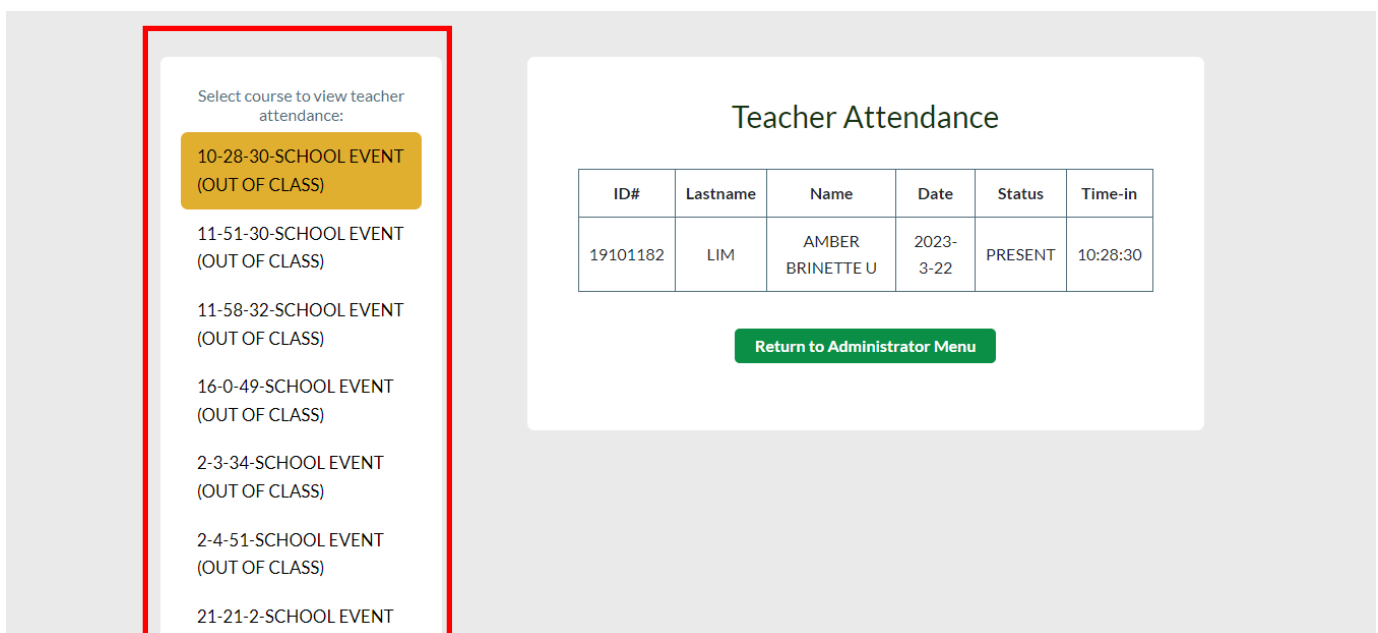
Return to Administrator Menu

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.

The screenshot displays a web interface for viewing teacher attendance. On the left, a sidebar titled "Select course to view teacher attendance:" lists several courses. The first course, "10-28-30-SCHOOL EVENT (OUT OF CLASS)", is highlighted in yellow. On the right, a box titled "Teacher Attendance" contains a table with the following data:

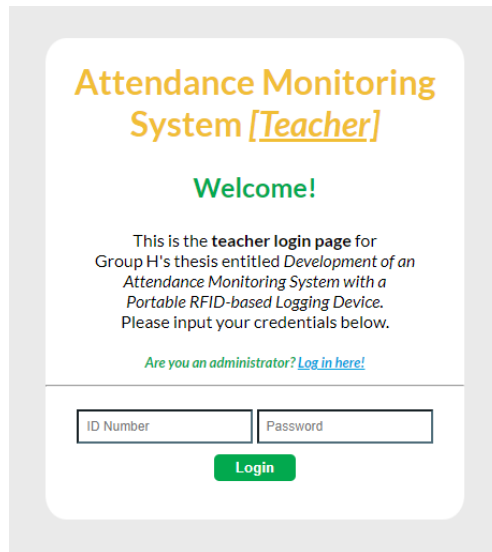
ID#	Lastname	Name	Date	Status	Time-in
19101182	LIM	AMBER BRINETTE U	2023-3-22	PRESENT	10:28:30

Below the table is a green button labeled "Return to Administrator Menu".

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

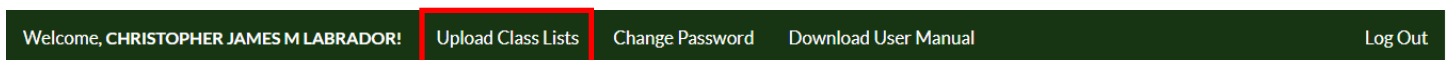
Uploading Class Lists

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 "Are you an administrator? Log in here!" in blue. At the bottom, there are two input fields: "ID Number" and "Password", followed by a green "Login" button.

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



- 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

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

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

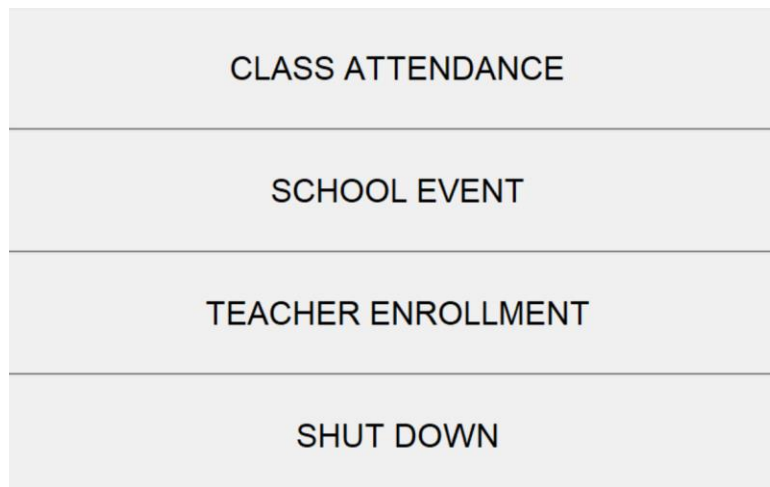
- Select the “Upload Class List and Set Configurations” button at the bottom of the page to complete the process.

Upload Class List and Set Configurations

Taking Attendance

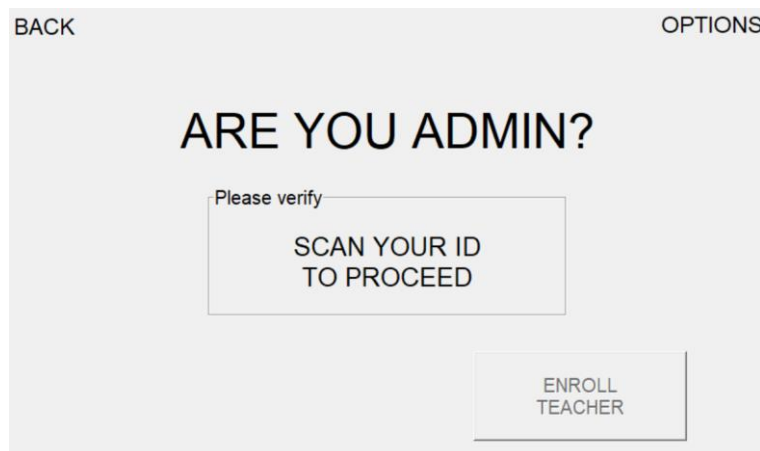
(Note: Make sure that both the local server and the portable device are turned on and connected to the internet to ensure the synchronization of necessary files for the attendance taking process.)

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.

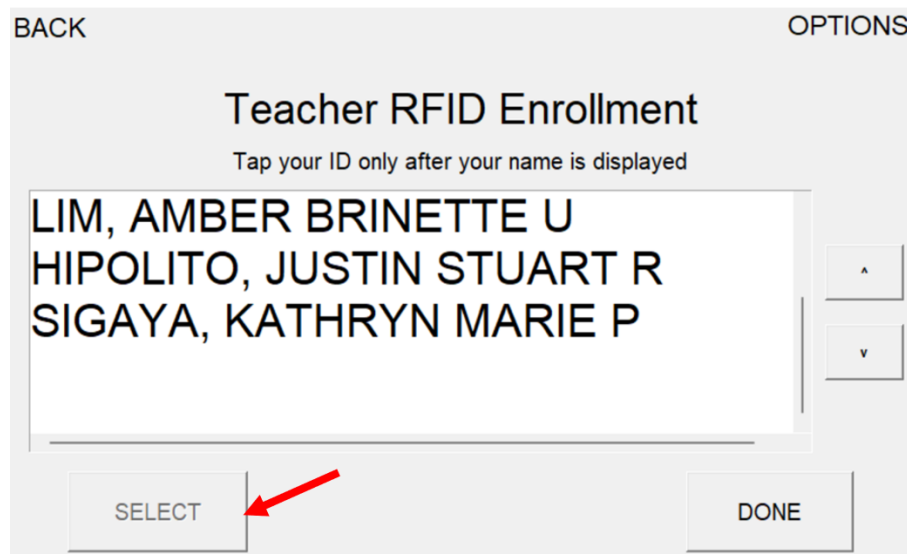


Teacher Enrollment

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



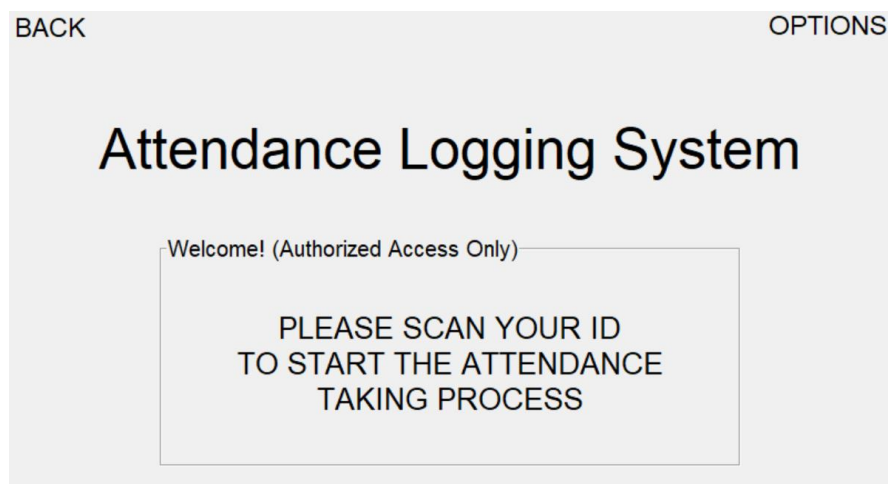
2. After clicking “Enroll Teacher”, select the name of the teacher you wish to enroll into the database and click on the button found on the lower left corner of the screen. The text will change to “Scan” or “Overwrite” depending on whether the teacher’s ID has already been enrolled or not.



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

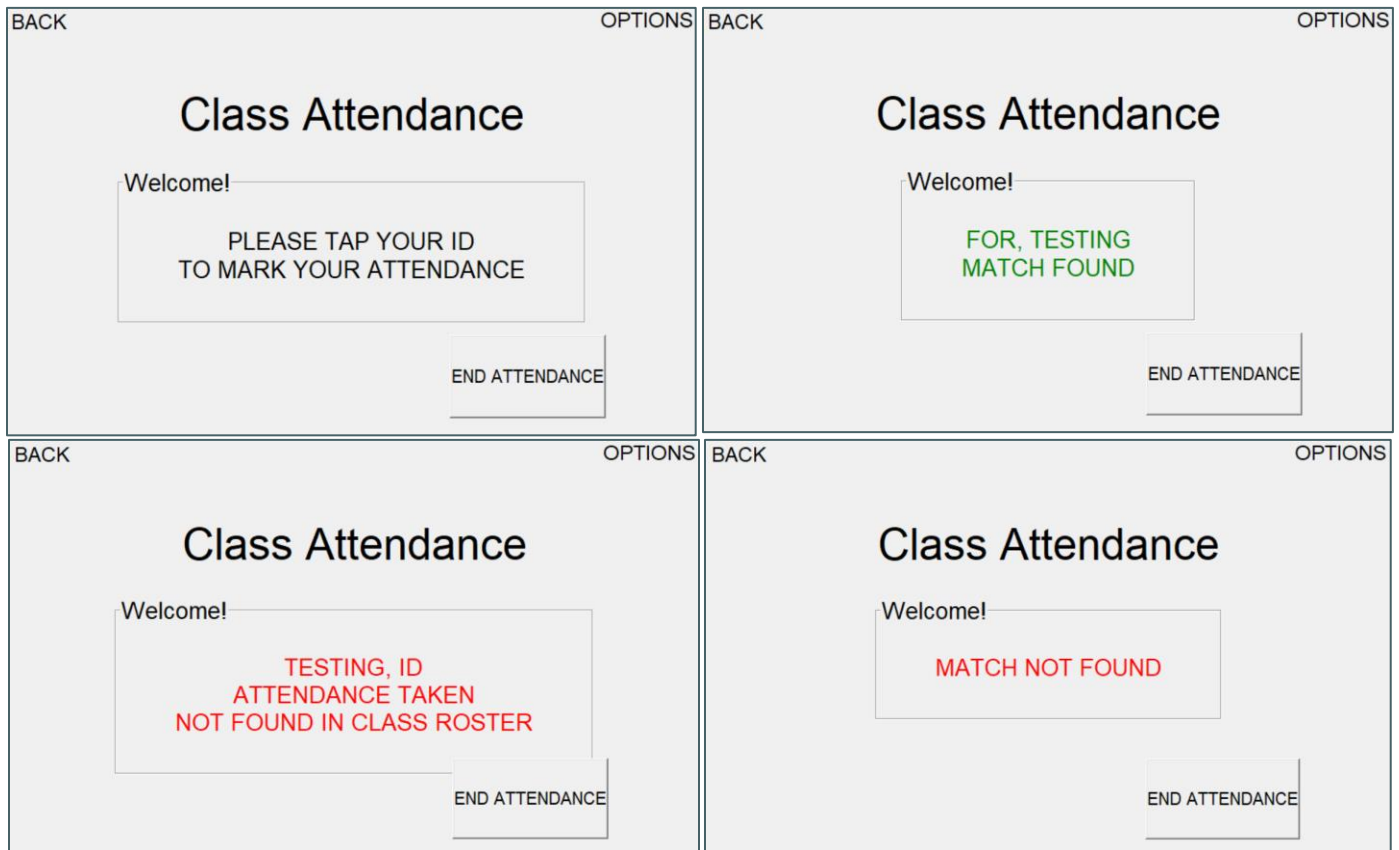
Tap your ID only after your name is displayed

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

SELECT CREATE ATTENDANCE LOG DONE

Attendance Taking

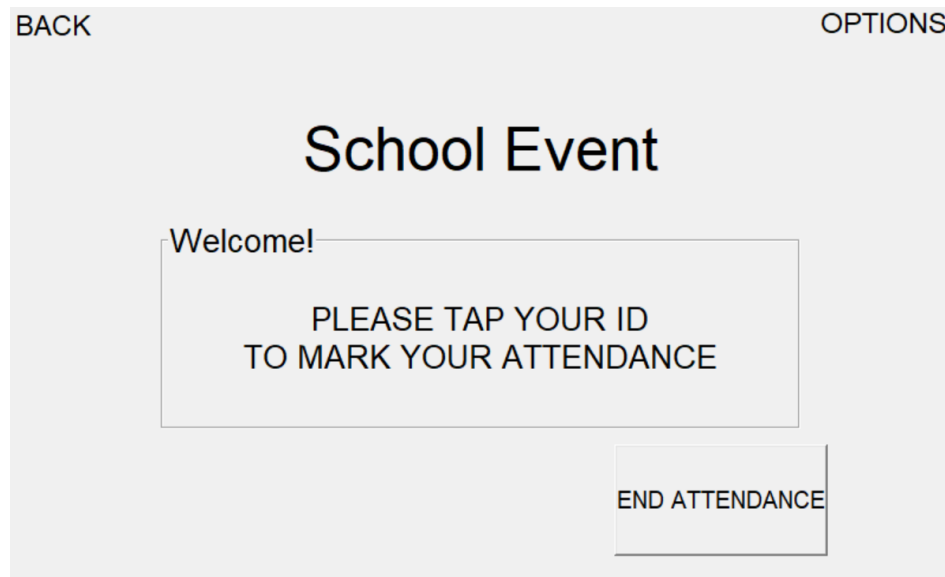
8. Allow students to tap their ID on the scanner to begin the attendance taking process. The display will change momentarily to indicate the detection of the student's ID.



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.

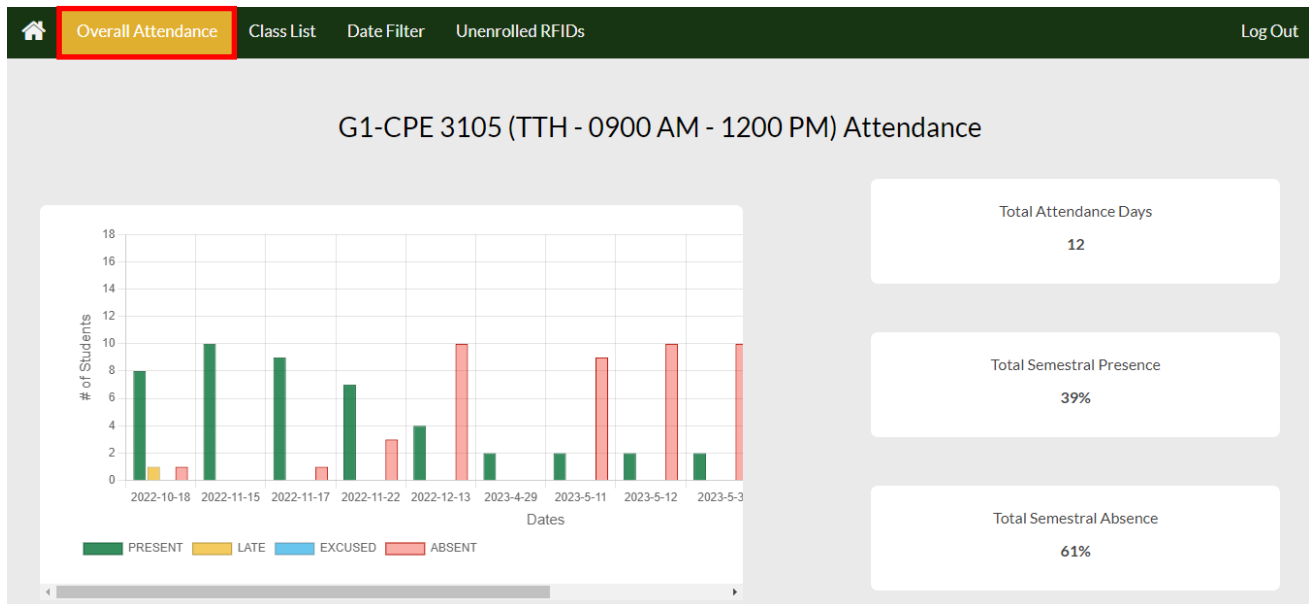
Welcome, CHRISTOPHER JAMES M LABRADOR! Upload Class Lists Change Password Download User Manual Log Out

SELECT THE CLASS YOU WANT TO MONITOR:

0-50-12-SCHOOL EVENT (OUT OF CLASS)	21-21-2-SCHOOL EVENT (OUT OF CLASS)	21-45-48-SCHOOL EVENT (OUT OF CLASS)
23-22-9-SCHOOL EVENT (OUT OF CLASS)	23-3-49-SCHOOL EVENT (OUT OF CLASS)	G1-CPE 3105 (TTH - 0900 AM - 1200 PM)
G1-CPE 3108 (MW - 0830 AM - 1000 AM)	G1-CPE 71N (TH - 0430 PM - 0730 PM)	G1-CPE TEST (T - 0100 PM - 0400 PM)
G2-CPE 3101L (T - 0900 AM - 1200 PM)	G2-CPE 3105 (TTH - 0100 PM - 0400 PM)	G2-CPE TEST (TH - 0800 AM - 1200 PM)

Overall Attendance

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

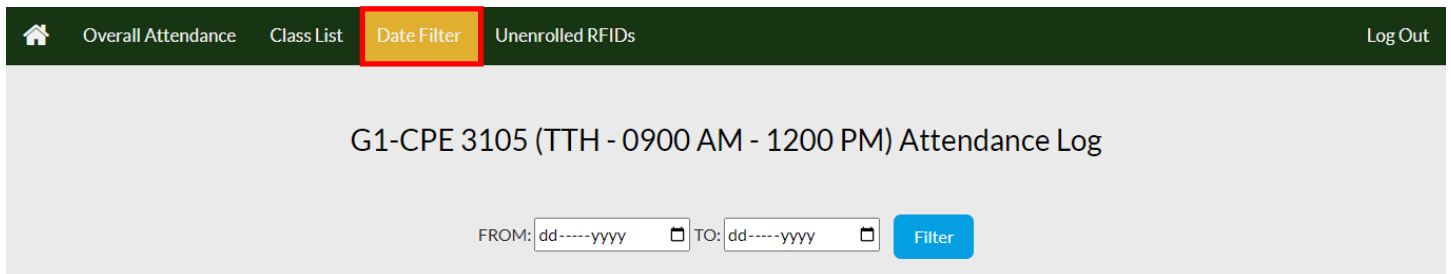
G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance Log

Export (Summary) Export (Detailed)

Name	Attendance Percentage (Out of 12 days)
ABELLA, VINCENT DOMINGUITO	75%
ABIERA, IKE KIAN GADAYAN	8%
ACAIN, JHAYCEE ANTHONY PITOGO	8%
ANGELES, BEA MONICA AMANDORON	8%
BAJAN, ZVI CINCO	25%
CARANO-O, CYRUS NOEL MONTEMAYOR	17%

Date Filter

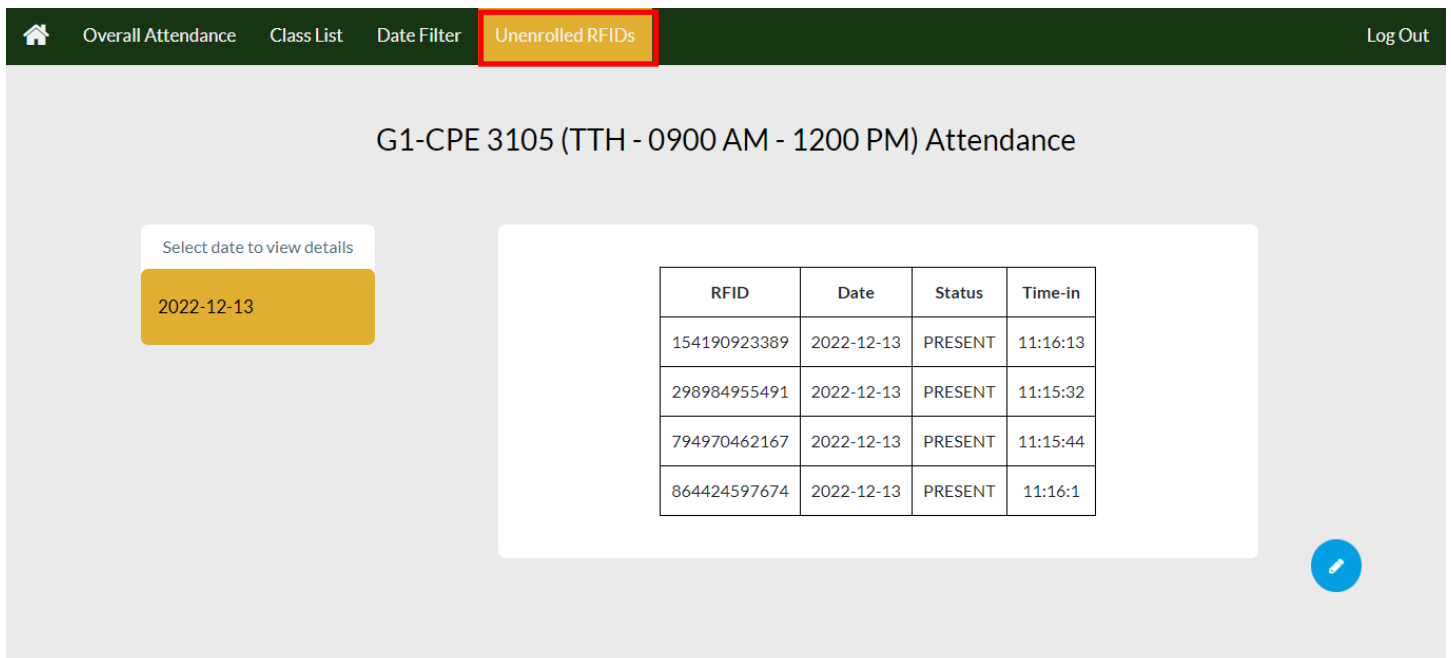
- The “Date Filter” option allows the user to filter out the attendance days based on a range of selected dates.



The screenshot shows the top navigation bar with a dark green background. The 'Date Filter' tab is highlighted with a red border. Below the navigation bar, the title 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance Log' is centered. Below the title, there are two date input fields labeled 'FROM:' and 'TO:', each with a calendar icon. A blue 'Filter' button is positioned to the right of the 'TO:' field.

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.

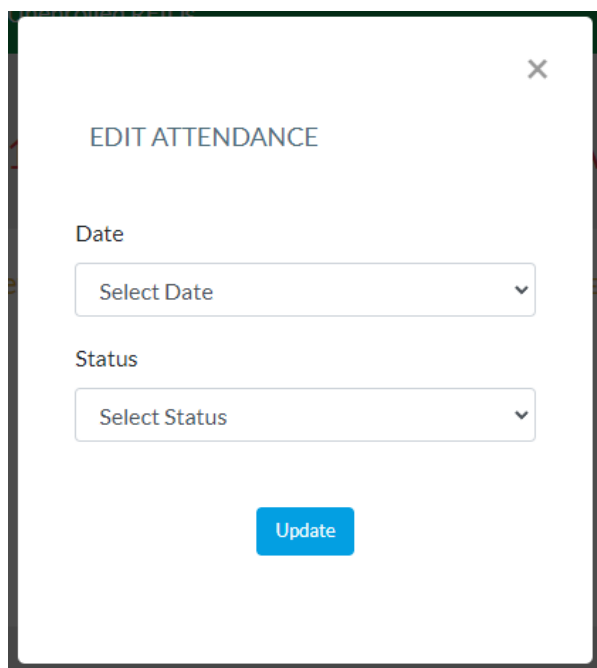


The screenshot shows the top navigation bar with a dark green background. The 'Unenrolled RFIDs' tab is highlighted with a red border. Below the navigation bar, the title 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance' is centered. On the left side, there is a date selection interface with a button labeled 'Select date to view details' and a highlighted date '2022-12-13'. In the center, there is a table displaying attendance data for the selected date. On the bottom right, there is a blue circular button with a white pencil icon, indicating an edit function.

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.



The screenshot shows a modal window titled "EDIT ATTENDANCE" with a close button (X) in the top right corner. Inside the modal, there are two dropdown menus. The first is labeled "Date" and has a placeholder text "Select Date". The second is labeled "Status" and has a 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.

×

Class List Attendance Report (Summary)

PAQUIBOT, JUN NIEL TAGHOY	1	0	0	11	12	8%
PLAZO, KAYLA MILLICENT MALOLOY-ON	4	0	0	8	12	33%
SOLON, VICTORIGEN SUQUIB	1	0	0	11	12	8%
TARUC, CHED VARQUEZ	1	0	0	11	12	8%

You can send a copy of the attendance report via email or you can download it in CSV or PDF format.

19102579@usc.edu.ph

Send

Download

3. After selecting the exporting option, the user will be prompted to decide what file type to send the report as. File types available are .PDF and .CSV.

Changing Password

1. To change your account password after logging in, click the “Change Password” tab at the top navigation bar.

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

2. If you do not remember your password, please contact the administrator to change your account password.

Logging out

1. To log out of your account, simply click on the “Log out” option found on the right side of the top navigation bar.

Welcome, CHRISTOPHER JAMES M LABRADOR!

[Upload Class Lists](#)

[Change Password](#)

[Download User Manual](#)

[Log Out](#)

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.

GROUP-H > Modules

63 Student View

Quizzes
Modules
Syllabus
People
Rubrics
New Analytics
Assignments
Discussions
Grades
Pages
Files
Outcomes
BigBlueButton
Collaborations
Settings

Collapse All View Progress + Module

This is a Sample Module.
A module is usually one unit, one topic, or one week of content.
Sample Page
Sample Discussion
Sample Quiz
Sample Assignment
Want to create an additional module? Select the "+ Module" above.

Course Status
Unpublish Published
Import Existing Content
Import from Commons
Choose Home Page
View Course Stream
New Announcement
New Analytics
View Course Notifications
Coming Up
Nothing for the next week

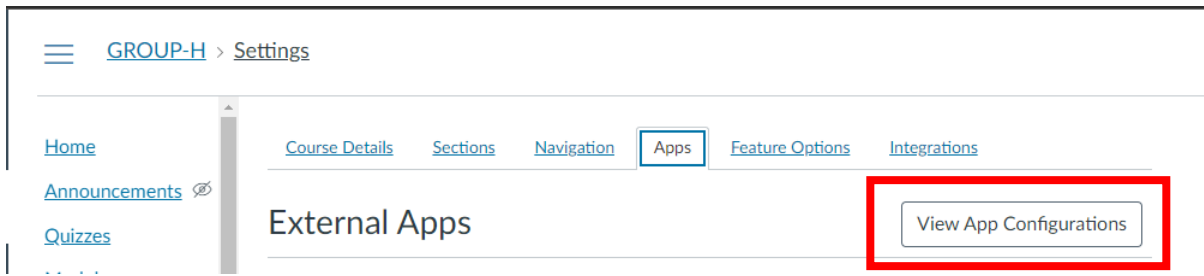
2. Select “App” tab inside Settings.

GROUP-H > Settings

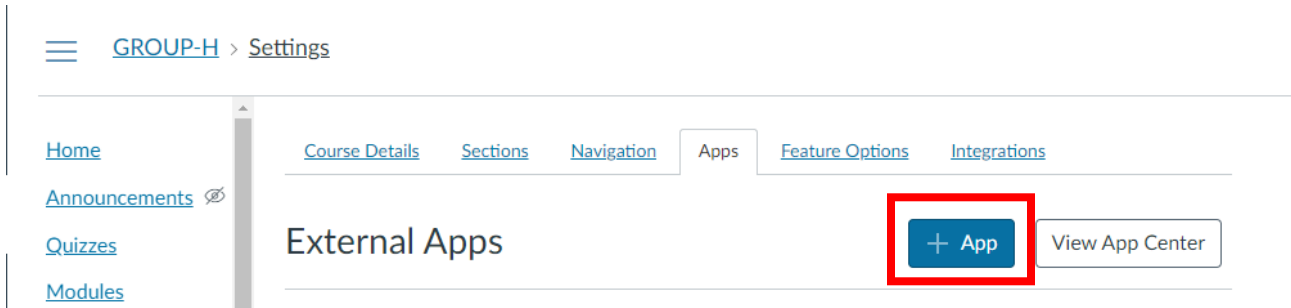
Home Course Details Sections Navigation **Apps** Feature Options Integrations

Course Status
Unpublish Published
Import Existing Content
Import from Commons
Choose Home Page
View Course Stream
New Announcement
New Analytics
View Course Notifications
Coming Up
Nothing for the next week

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

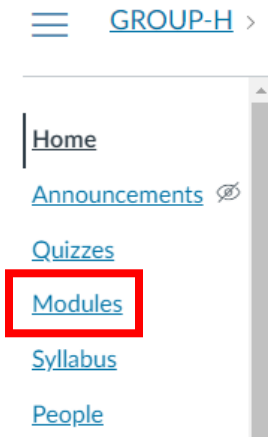
secret

Launch URL

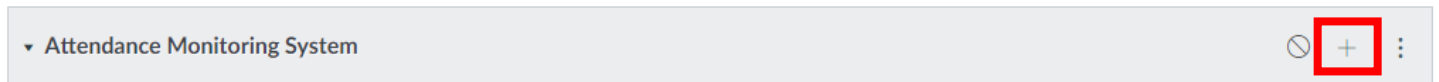
http://localhost/teacher-login.php

External URL

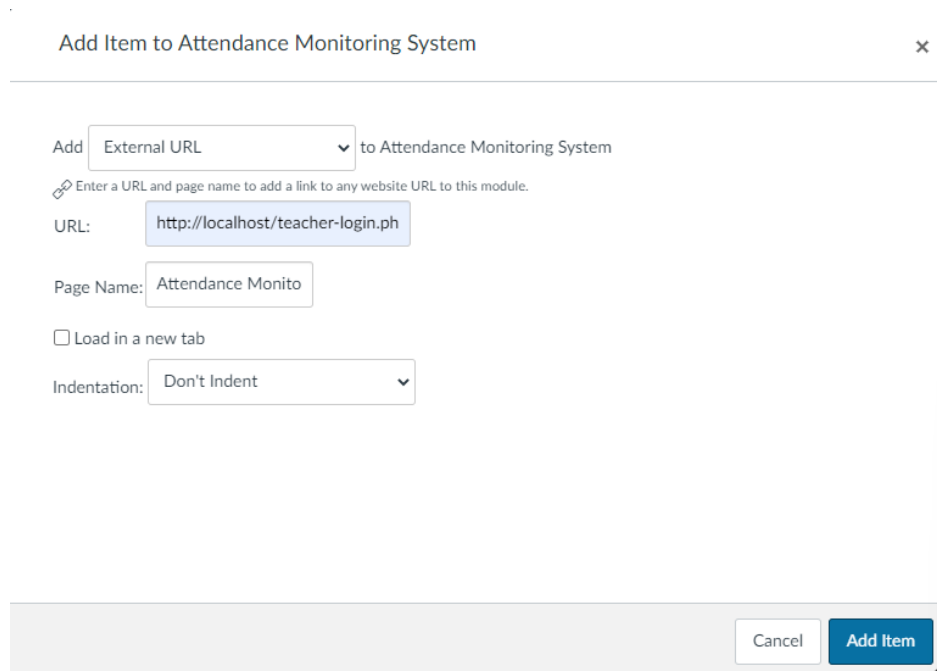
1. Select the “Modules” tab in your course.



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' with a close button (x) in the top right corner. The dialog contains the following fields and options:

- 'Add' dropdown menu set to 'External URL', followed by the text 'to Attendance Monitoring System'.
- A small icon and the text 'Enter a URL and page name to add a link to any website URL to this module.'
- 'URL:' label followed by a text box containing 'http://localhost/teacher-login.ph'.
- 'Page Name:' label followed by a text box containing 'Attendance Monito'.
- A checkbox labeled 'Load in a new tab' which is currently unchecked.
- 'Indentation:' label followed by a dropdown menu set to 'Don't Indent'.

At the bottom right of the dialog are two buttons: 'Cancel' and 'Add Item'.