THE Impact Ranking

University	:	Universitas Padjadjaran
Country	:	Indonesia
Web Address	:	https://unpad.ac.id/

Waste (WS)

Reduce Paper and Plastic Program

SIAT E-Office Universitas Padjadjaran
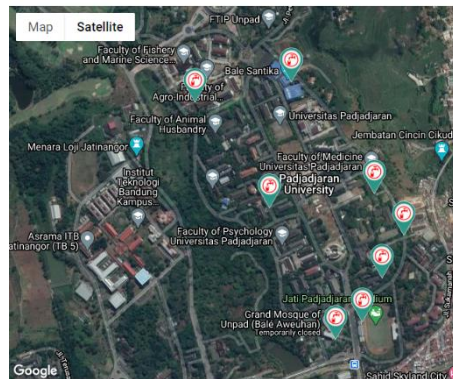
Jalatista, free and clean drinking water facilities at Jatinangor campus, Universitas Padjadjaran
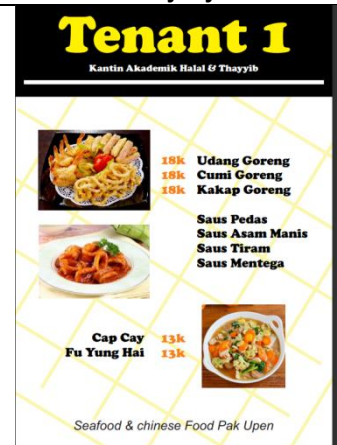
Provide "Halal & Tayyib" Canteen

Enterprise Resource Planning (ERP) activity

Drinking Water Bottle Usage (tumbler)
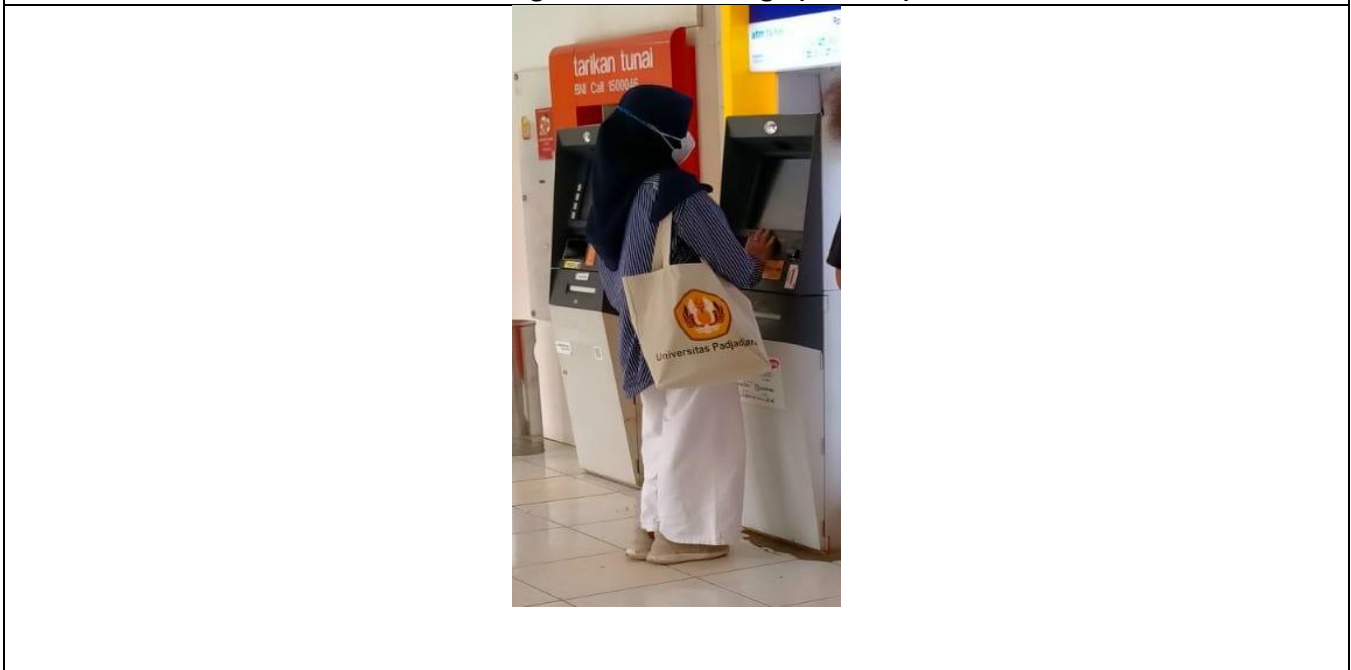
Reduce plastic bag and Reusable bag
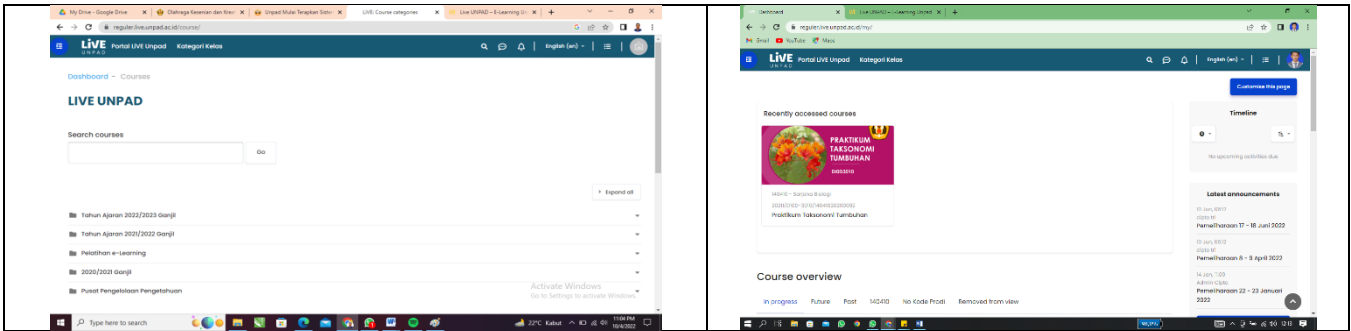
Live Unpad is a Learning Management System (LMS) Learning in Virtual Environment Universitas Padjadjaran
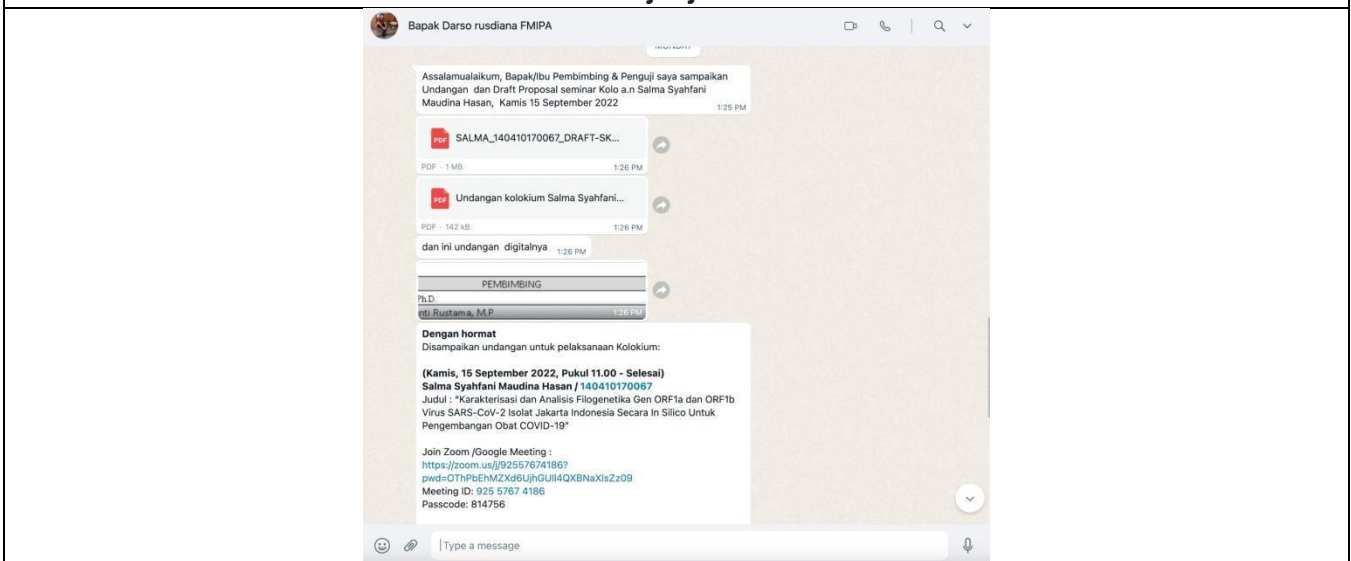
Digital invitation letter for student's final project meeting

KKN PPM Integrative and digital literacy (community service) with KOMINFO

HAK DAN KEWAJIBAN
PASAL 5

(1) **PIHAK KEDUA** berhak menggunakan ruangan Cafe yang disewa sesuai dengan Perjanjian ini.
(2) **PIHAK KEDUA** berhak menggunakan ruangan Cafe selama 5 (lima) hari kerja dalam seminggu (senin sampai dengan sabtu) mulai dari pukul 06.⁰⁰ WIB sampai dengan pukul 18.⁰⁰ WIB
(3) **PIHAK KEDUA** wajib menangung Biaya Penggunaan Listrik dan memasang meteran PLN Prabayar khusus untuk Cafe
(4) **PIHAK KEDUA** wajib memelihara kebersihan ruangan Cafe yang disewa dan menjaga keamanan property nya
(5) Kerusakan ruangan Cafe yang diakibatkan karena kelalaian pihak Kedua selama waktu sewa ini berlangsung, menjadi tanggung jawab **PIHAK KEDUA**.
(6) **PIHAK KEDUA** wajib menyelenggarakan protokol kesehatan selama berusaha, menjaga kebersihan, dan menjamin produk yang dijual baik untuk dikonsumsi serta tidak menjual produk/barang yang bersifat haram secara agama dan dilarang diperjualbelikan oleh negara.
(7) **PIHAK KEDUA** dilarang menggunakan plastik kemasan sekali pakai (kresek), *styrofoam*, serta kertas bekas sebagai kemasan makanan.
(8) **PIHAK KEDUA** Wajib melakukan pemilahan sampah padat menjadi tiga bagian yaitu:
a. sampah padat yang dapat didaur ulang/memiliki nilai tambah;
b. sampah padat yang tidak dapat didaur ulang;
c. sampah padat makanan/organik.
(9) **PIHAK KEDUA** wajib mengelola limbah cair dengan baik dan pencemaran lingkungan yang terjadi menjadi tanggung jawab pihak kedua.

PERJANJIAN KERJA SAMA
ANTARA
SEKOLAH PASCASARJANA UNIVERSITAS PADJADJARAN
DAN
....
TENTANG
SEWA BANGUNAN CAFE DI LINGKUNGAN UNIVERSITAS PADJADJARAN

Nomor : 5649/UN6.Q/HK.04/2022

Nomor : ....

Pada hari ini tanggal satu bulan Oktober, tahun Dua

The agreement of building leasehold and regulation of waste management between Universitas Padjadjaran and occupants

Description:
SIAT E-Office

E-office administration system is an administrative data management system that is carried out digitally through the SIAT platform. This system has been established based on the Peraturan Rektor No. 2 Tahun 2020 concerning Employment. **The system has been implemented 100%** for students, lecturers, and the academic community at Universitas Padjadjaran and directly **supports the paper and plastic waste reduction program in almost all administrative activities** (https://siat.unpad.ac.id/eoffice/index.php/login)**.** For students, this system is used to facilitate several activities such as student attendance, research proposals, making a study plan for 1 semester, applying for a scholarship, and others, and help student organizations to submit activity proposals at Universitas Padjadjaran. This system also help lecturer to simplify the process of submitting the student's GPA or data. In addition, it facilitates the learning process between students and lecturers, because it has been integrated through E-Learning platform, namely Learning in Virtual Environment Unpad (Live Unpad) during the Covid-19 pandemic.

For Example:
In October 2021, biology department sent more than 65 invitation letters to lecturers or civitas Academica. If in average, every month biology department produce 60 sheet letter invitation, so **in one year more than 720 sheet paper reduce by this system.** This is only in biology department.
Number of student graduating from department biology period 2021:
https://docs.google.com/spreadsheets/u/2/d/1eebKRQkriidCgsB6nvIL1oSkty9r464B/edit?usp=drive_web&ouid=101963535975623885122&rtpof=true

Jalatista
Jalatista is one of the facilities at Universitas Padjadjaran that produce free and clean drinking water filling station provided to all Universitas Padjadjaran members. **Jalatista can be found in almost every faculty building at Jatinangor Campus**, and to support reducing plastic drinking bottles waste. **Jalatista is still well maintained,** some buildings are currently not provided water during pandemic. However, in August 2022, all Jalatista (10 filling station) had provided free and clean drinking water. (Website of Jalatista Universitas Padjadjaran https://siat.unpad.ac.id/sarpras/jalatista/)

"Halal & Tayyib" Canteen

The halal & tayyib canteen is one of the new canteens developed by Universitas Padjadjaran and has been operating since 2022. This is to develop halal and healthy food in Universitas Padjadjaran area and **has been accompanied by 53 certified halal providers** and **assisted by students from the Faculty of Industrial and Food Engineering**, Universitas Padjadjaran. There are about 43 canteen business actors of which **34 participated in the halal and healthy food management training held in 2021,** and it means **79% attended the training.** In addition to developing the halal and healthy concept, Universitas Padjadjaran **also concern with food hygiene and sanitation,** because most of the business actors in the canteen have been given training and they should follow SOP (protocol), included waste management, include how to reduce paper and plastic.

Enterprise Resource planning (ERP)
Universitas Padjadjaran **had implemented the Enterprise Resource Planning (ERP) software system in every business activity** and integrated with digital technology into institutional activities to increase management speed, transparency, and accountability. The implementation of ERP in the business sector is a follow-up to the e-office system that has been implemented in Universitas Padjadjaran **since 2016.** This system can **streamline office administration activities, reduce energy consumption, and paper usage for correspondence activities.**

Drinking Water Bottle Usage (tumbler)
One of Universitas Padjadjaran responsibility to reduce the use of plastic bottles is c**ampaign the reusable of drinking bottles.** Universitas Padjadjaran **designed their own drinking bottle** which has been used by members. The students of Universitas Padjadjaran **bring their own tumbler/ drinking bottles** as a form of their concern for the issue of plastic bottle waste, this is the **output after attending Olah Kreatifitas dan Kewirausahaan's** course, and comparable with its integration by existing Jalatista facilities on the Unpad Jatinangor Campus. Students and the academic community can bring their own drinking bottles, then refill them at the nearest Jalatista.

Reusable bag
Others hand, students also use tote bags, instead of using plastic bags. **The use of tote bags among Universitas Padjadjaran students is quite massive.** We can easily find students who use tote bags from different majors. They consciously know that the use of tote bags can reduce the amount of plastic waste. **This is the output after attending Olah Kreatifitas dan Kewirausahaan's course.** And some departments designed and distribute their own tote bags as a form of campaign.

LiVE Unpad
Learning Management System (LMS) **L**earning in **V**irtual **E**nvironment Universitas Padjadjaran (LiVE Unpad) is a learning management system which **done in virtual and free paper based.** During the lecture activities, **80% of the Unpad LIVE platform was applied to the lecture process,** lecture videos, checking class schedules, doing assignments, and quizzes, all of them were done without the use of paper. This service helps Unpad in reducing paper usage when compared to conventional lecture methods. Not only that, but this system also reduced paper usage for research progress and final examination. For example: If students from Biology department want to finish their degree, they should follow this regulation. 1) Research Plan Proposal. 2) Research Colloquium. 3) Defense/ final examination.

1) Research Plan Proposal
   If one student from biology department average printed their proposal around 50 sheets paper, and they should distribute the proposal to two supervisor and two examiners. And the department office will print 4 invitation letters to supervisor and examiner. We can calculate like this:

   $$Proposal \dots\dots. 50 \; sheet \; x \; 4(supervisors \; and \; examiners) = 200 \; sheet \; paper$$

   $$invitation \; letter \dots\dots\dots\dots 2 \; sheet \; x \; 4 \; (supervisor \; and \; examiner) = 8 \; sheet \; paper$$

Total paper used: 200 + 8 = **208 sheep paper**

2) Research Colloquium
   If one student from biology department average printed their research progress around 100 sheet paper, and they should distribute the proposal to two supervisor and two examiners. And the department office will print 4 invitation letters to supervisor and examiner. We can calculate like this:

   $Research\ Progress ……….100\ sheet\ x\ 4(supervisors\ and\ examiners) = 400\ sheet\ paper$

   $invitation\ letter …………2\ sheet\ x\ 4\ (supervisor\ and\ examiner) = 8\ sheet\ paper$

   Total paper used: 400 + 8 = **408 sheet paper** (this is only draft, not fix thesis)

3) Defense/ final examination
   For the last final examination, the student should bring the final draft, and they should print it. So they will print for 480 sheet paper.

In 2021, around 84 students graduated from Biology department, Universitas Padjadjaran. So, we can calculate that:

$$(208\ sheet + 408\ sheet + 408\ sheet)x84\ students = \ 86.016\ sheet$$

It means, with this system management, **we can reduce 102.400 sheet paper only in Biology Department** in 2021. This is not included others invitation letters. In addition, 6013 students graduated from Universitas Padjadjaran, **means more than 5 billion sheet paper reduced**.

Digital invitation letter for student's final project meeting
The digital invitation letters of final project **have been 100% implemented at Universitas Padjadjaran**. The invitation or information system regarding the final session that is implemented is in the form of providing soft copies related to the scheduled examination, invitation letters for the examination, and Virtual meeting links. This activity is minimizing the use of paper when compared to the conventional system of invitations letter for examination.
For example:
In Biology department, there are 3 kinds of examination that should be followed. One examination will print 2 sheet paper for 4 lecturers. It means:
$2\ sheet\ paper\ x\ 4\ lecturer = 8\ paper$ (This is only for 1-time seminar, biology department has 3 seminar regulations to finish the student's degree)
In 2021, there are 84 students graduated from Biology department, we will use 2.016 sheets. With digital invitation letters, we can reduce usage of 2.016 sheets paper only in one department. How about at Universitas Padjadjaran? 6013 student was graduated, which is mean **more than 12.122.208 sheet paper reduced**.

KKN PPM Integrative and digital literacy (community service) with KOMINFO
Universitas Padjadjaran and Kementerian Komunikasi dan Informatika (KOMINFO) provided education for literacy in the era of digitalization. This program was **integrated with community service involved 2,951 students** about literacy information or learning science that can be accessed virtually by utilizing **developed information technology** and can be accessed through mobile phone and laptops (https://pandu.kominfo.go.id/event/306). The a**pplication of literacy or digitalization can help, support, and minimize the use of paper** which is usually used in the form of books, magazines, and newspapers to turn into *e-books*, websites, and other digital learning media.

The agreement of building leasehold and regulation of waste management between Universitas Padjadjaran and occupants

Universitas Padjadjaran provide policies and cooperation to business actors who rent buildings at Universitas Padjadjaran in the form of policies on their waste. In the form of cooperation between Universitas Padjadjaran and the cafe and canteen managers, a Standard Operating Procedure (SOP) on the management of **paper and plastic waste produced must be managed and separated based on the SOP**. This is an effort of Padjadjaran University to contribute safe the earth