

PREVENTION AND SAFETY MEASURES DURING COVID-19 TIMES

PAVILION OF KNOWLEDGE CIÊNCIA VIVA SCIENCE CENTRE REOPENING TO THE PUBLIC

1 JUNE 2020

CIÊNCIA VIVA

PAVILHÃO DO
CONHECIMENTO
CENTRO CIÊNCIA VIVA





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These prevention and safety measures and guidelines are aimed at all employees, various service providers, especially cleaning and security teams, visitors to the Pavilion of Knowledge – Ciência Viva Science Centre, and other direct interlocutors (suppliers, customers, and others).

For this purpose, measures, guidelines and general recommendations released by various entities, namely the World Health Organization (WHO), the national Directorate-General for Health (DGS), the Authority for Working Conditions (ACT), and the Order of Engineers (recommendations for operating and using technical building systems to prevent the spread of the SARS-CoV-2 virus), have been taken into account.



1. Human Resources

1. Human Resources

This section defines measures related to the safety protocols of the employees, with specific operating conditions, including rules regarding the allocation of the different areas, use of personal protective equipment, scheduling and physical distance that add to the general conditions for relaxation of confinement measures. These measures include the market availability of facemasks and disinfectant, regular cleaning of spaces, hand hygiene, respiratory etiquette and civic duty of physical distance.

1.1. General measures

The return of employees to their roles in the facilities of Pavilion of Knowledge is ensured within the framework of the guidelines defined by the government. This return affects employees who perform their duties in person, as well as those necessary to ensure the functioning of services in conditions of efficiency and safety. For this:

// The **telecommuting regime can be applied**, after consultation with the department coordinators, as long as it does not affect the regular functioning of Ciência Viva.

// The Human Resources Department will select the employees returning to the Pavilion of Knowledge facilities, according to the guidelines indicated by the board, attending to those responsible for departments and services. This selection will cover employees who:

- Return to the facilities in a regular regime because they cannot perform their duties by telecommuting;
- Return to the facilities on a shift or rotational system;
- Continue to telecommute permanently.

// Exempted employees includes those who:

- Have submitted a request to social security for assistance to children under 12 years old;
- Have a health impediment identified by a medical declaration that attests to the health condition and justifies their special protection, following what was established by the national Directorate-General for Health (DGS).

// In the case of the departments in which the functions are compatible with telecommuting, minimum services must be ensured by at least 2 elements per team to allow the full functioning of all activities.

- // Shifts are proposed by the coordinators of each department taking into account the conditions of exemption mentioned above; any changes, in case of justified need, must be communicated in advance to HR.
- // Employees must maintain regular contact with the respective department coordinator, by e-mail, video conference or telephone, to update on the work performed; the department coordinator must define the periodicity of this contact.
- // It is recommended that the **circulation of employees** inside the Pavilion of Knowledge facilities is kept to a minimum. For internal communication, e-mail and the videoconference platform provided by the DSI (Department of Information Systems) should be preferred.
- // **Meetings between employees** within the facilities must take place in areas specially prepared for this, with air circulation and a maximum occupancy that guarantees the recommended safety distance of two meters between chairs.
- // Warning to **not travel abroad** is still in force, and travel outside the country is not allowed except in specific cases, and taking into account current border opening policy.
- // **Access by people external to Pavilion of Knowledge** is limited, apart from exceptional situations. For this, every week each department coordinator must send to the human resources department the plan of face-to-face meetings with external people, for evaluation and authorization by the board. This will be followed by a reinforcement of the protection, distance and hygiene measures provided in this plan.
- // Any employee who had contact with a person with a proven diagnosis of COVID-19 is not allowed to enter the facilities before the 14 quarantine days, counting from the last contact date.
- // At the end of the day, each employee is responsible for leaving their desks ready for cleaning, and during the day, on a regular basis, they must disinfect their desks in ways compatible with the specific characteristics of their roles.

// **As a rule, sharing equipment for personal use is not allowed**, namely desks, computers, telephones, office supplies and individual tools. When sharing is necessary, for reasons of physical distance, employees must first disinfect their workstations with an appropriate product.

// Employees must disinfect their hands before using commonly used equipment such as photocopiers and printers; alcohol gel will be available close to these devices.

1.2. Special work health and safety measures

Safety and health of employees must be reinforced through the adoption of special measures for individual protection, including, if necessary, reorganization of physical spaces to guarantee safe distances in the workplace. Special measures include:

// Conducting COVID-19 serological testing, available for all employees.

// If employees were in close contact with confirmed or suspected cases of COVID-19, they should not return to work before contacting the national health service helpline for appropriate guidance. This situation must be reported to the human resources department.

// Informing employees about changes in the functioning of Pavilion of Knowledge, prevention measures and rules stated in this document, reinforcing the following aspects:

- COVID-19 risk factors, its symptoms and forms of transmission;
- Measures to prevent contagion;
- Procedures to be adopted in case of a suspected case;
- Need for self-monitoring of symptoms;
- Support materials for consultation;
- Consultation with official national organizations, public health authorities and national Directorate-General for Health (DGS), paying special attention to epidemiological information on the incidence of COVID-19 in the geographical area of the Pavilion of Knowledge.

// Reinforcement of these actions with **communication** of clear and systematic information, in all the facilities and circulation areas, on the urgency to go to an isolation room whenever an acute cough, fever or difficulty breathing situation develops, as well as information about hand hygiene rules, respiratory etiquette and physical distance.

- // **Mandatory use of a facemask** by employees during their stay in the facilities, when it is not possible to guarantee the safe distance of two meters or when circulating in common areas. For this, **facemasks will be distributed to all employees**. Facemasks will be certified by entities authorized to issue application requirements, either regarding the type of facemask or regarding raw materials that can be used in their manufacture.

- // In specific situations and in those cases that the employee's role justifies it, such as the need for contact with the public – at the ticket office, the shop, exhibition areas, during public events and maintenance interventions –, the masks can be complemented with the use of protective visors and gloves.

- // It is **mandatory to measure body temperature when accessing the facilities**, using an automatic infrared fever detection device, to minimize skin contact. In the presence of COVID-19 symptoms, including fever higher than 38 °C, the employee must move to the isolation room and adopt the procedures established by the national Directorate-General for Health (DGS) in the guideline nr 06/2020.

- // **Continuous supply** to employees of essential products to reinforce the hygiene and protection measures against the risk of contagion at COVID-19, including:
 - PPE suited to the employee's duties;
 - Alcohol gel solution or disinfectant skin solution;
 - Paper tissues in the workplace;
 - Products that allow cleaning and disinfection of work surfaces (e.g., desks, tools and other workspaces).

- // It is recommended **to minimize direct contact between employees**, favouring work “side by side” or “back-to-back”, always ensuring a social distance of at least two meters.

- // **Placement of disinfectant gel dispensers** in strategic places, ensuring that these dispensers are loaded regularly and have the necessary maintenance.



2. Building and facilities

2. Building and facilities

This section defines the measures for the reorganization of areas and movement, including work and public areas, to guarantee the safety conditions of all occupants of Pavilion of Knowledge, and in accordance with the resolutions of the Government and public health authorities.

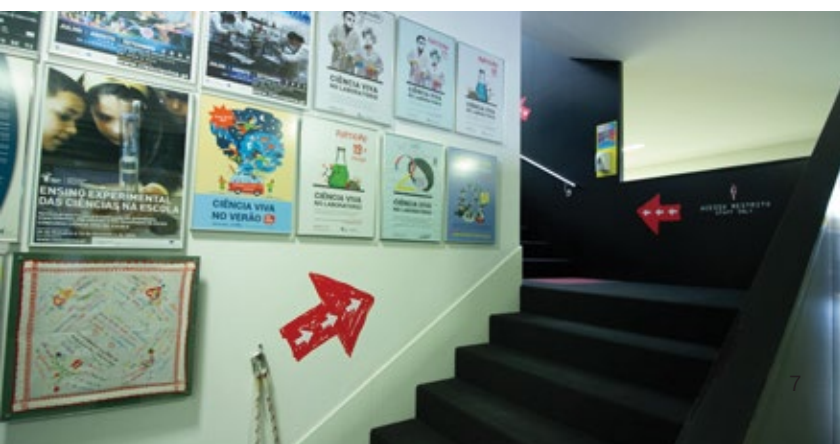
2.1. Circulation of employees

It is recommended that each employee uses their workstation whenever possible, and this should be considered a preferred place to stay in the facilities. All movements must be minimized and specific recommendations for each area must be followed. Circulation within the facilities will be structured around the need to guarantee social distance and protection against contamination. For this purpose, the following measures apply:

- // **Entrances and exits** for employees as well as for any occupant of the facilities, including during lunchtime, are mandatorily performed through the security control, where the body temperature should be measured, with respective registration;
- // The two meters distance between people circulating in the corridors must be respected;
- // The use of elevators, which are reserved only for the movement of materials and equipment, is prohibited;
- // Entrance to the “Mezzanine office space” will be by the stairs on the reception side, while the exit should be by the stairs on the Laboratory side. Circulation must be one-way, clockwise, with the doors remaining open to reduce contact with door handles.

2.1.1 Workspaces

In response to the development of the guidelines from the Government and public health authorities, the HR team, in a dynamic and articulated manner with the other departments and respective coordinators, will develop a plan of the organization of workspaces appropriate to each stage of the COVID-19 pandemic evolution. In this initial phase, and according to the specific characteristics of each work area, the following indications are implemented:





// To comply with the previous point, alternate times for occupying workrooms and administrative and technical areas may be defined.

2.1.2 Common areas for employees

Sanitary facilities

When using these facilities, the following guidelines should be followed:

- Use of the facilities by external people is forbidden; they must be guided to public sanitary facilities;
- Progressively introducing devices to minimize contact with sanitary surfaces and equipment (e.g., automatic taps and dryers);
- Installation of automatic surface disinfectant dispensers;
- Reinforcing the cleaning of sanitary facilities.

Office Pantry

Access is limited to the use of the pantry equipment (e.g., refrigerator, microwave, coffee and water machine), always taking into account the physical distance measures, as well as the adoption of hygiene and disinfection procedures, with the following recommendations:

- It is not advisable to stay beyond the time strictly necessary for use of equipment;
- It is not advisable to use common utensils, such as glasses, cutlery, plates or cups; instead use of own utensils is recommended. Each employee is responsible for cleaning of utensils and storage in their workstation;
- To minimize gatherings in collective areas, it is recommended, whenever possible, that meals be taken at the respective workstation.

Ticket office

Being for public service, this area will be subject to a specific reorganization work to minimize risks of contamination. For this reason, measures to protect employees and the public are reinforced, particularly regarding the rules of social distance and hygiene. The following measures were taken:

- Installation of a physical separation barrier between ticket operators and the public, ensuring a minimum distance between the operator and the user of 1 meter;

- Compliance with preventive measures for public service stations determined by the Government and public health authorities;
- Mandatory body temperature measurement for each visitor;
- Mandatory use of a facemask by visitors aged 10 or over;
- Limited access to the ticket office to a maximum of two visitors simultaneously;
- In the waiting area before the ticket office, the adequate separation distance between each visitor must be maintained according to markings on the floor;
- Reinforcement of cleaning, disinfection and hygiene of individual public service stations;
- The presence at the ticket office is limited to two operators at the same time;
- 2 meters distance between the two public service stations;
- Installation of automatic alcohol gel dispensers for operators and visitors;
- Provision of surface disinfectants to ensure cleaning of surfaces by operators after use by each visitor;
- Recommendation of payments by automatic means, via ATM, Visa or MB-Way, avoiding the handling of cash;
- It is recommended that all information contained in leaflets be made available in electronic format. If paper leaflets are used, unitary dispensers must be applied;
- If necessary, visitors should use the electronic complaints book, available at www.livroreclamacoes.pt. Usage of complaints book in physical format is not allowed, following the terms defined in article 35-I of Decree-Law no. 10-A / 2020, of 13 March, ratified by Law no. 1 -A / 2020, of March 19, and amended by Decree-Laws No. 10-E / 2020, of March 24, and 12-A / 2020, of April 6, by Laws No. 4-A / 2020, of April 6, and 5/2020, of April 10, and by Decree-Laws No. 14-F / 2020, of April 13, 18/2020, of April 23, and 20/2020, of May 1.

2.2. Circulation of the public and visitors

The presence and circulation of visitors inside Pavilion of Knowledge and exhibition areas follow regulations from the Government and public health authorities. Considering the specific characteristics of Pavilion of Knowledge, as an interactive science centre, essential and incremental measures for the safety and protection of visitors against the risks of contagion were implemented. For this, the following is determined:

- // Entrance of visitors who present any symptoms or have had contact with a person with a proven diagnosis of Covid-19 until the end of the 14 quarantine days, counting from the last contact date is forbidden;
- // The visit will be organized in shifts, and must be previously scheduled using the appointment system available at www.pavconhecimento.pt, and include the time of





arrival, to comply with the revised capacity. Visitors will be informed that the maximum duration of the visit is 2 hours. Visitors who did not scheduled a visit may have conditioned access depending on the capacity available at the time;

- // Visitors are required to enter through the 1st floor, where the ticket office is located. Body temperatures will be tracked here, and masks distributed to users without one;
- // Visitors are required to exit through the ground floor, next to the shop, to reduce the flow at the entrance to floor 1;
- // The turnstiles on floors 0 and 1 will be switched off to minimize surface contact, and only single access gates will be available;
- // Visitors must maintain a minimum distance of 2 meters to other visitors except their companions;
- // The use of the public elevator in the exhibition area is reserved for users with special needs or with baby carts;
- // Monitoring spots at the entrance of each exhibition room control the respective capacity.
- // Temporarily and until further notice, the Canine Passport program is suspended.

2.2.1 Public spaces and exhibition areas

In accordance with the evolution of Government guidelines and public health authorities, the exhibition department, in cooperation with the technical department, will develop a plan for the reorganization and distribution of public spaces and exhibition areas in the Pavilion of Knowledge. For this initial phase, and according to the specific characteristics of each public access area, the following measures are established:

- // The maximum capacity of the Pavilion of Knowledge is reduced, following the recommendations that each visitor should have an area of 20 m² and a minimum distance of 2 m from visitors other than their companion;
- // Information regarding the respective capacity of each room, and the recommendations on its use, namely the mandatory use of a mask, will be clearly and visibly posted in each room;
- // Due to its characteristics, some exhibits will remain closed to the public, according to the attached list;
- // Use gloves for handling exhibits is mandatory. Disposable gloves ("clown gloves") are available at the entrance of each room;

- // Reinforcement of hygiene and disinfection of all equipment and exhibits, including during the period of opening to the public;
- // During operation periods of operation, explainers will clean and disinfect the modules under their responsibility, with a kit specially designed for this purpose;
- // Once used, disposable PPEs will be placed in a separate compartment, in a properly closed bag, and disposed with the common trash, not being recycled. In case of use of PPE in situations of suspicion or confirmation of COVID-19, all disposable PPE will be placed inside two plastic bags at least, filled to 2/3 of their capacity, placed in the area reserved for this purpose, and health authorities will be contacted.

Isolation room for employees and visitors

In case of need, visitors and employees will have at their disposal an isolation room, properly signposted on the 1st floor, according to the guidelines recommended by public health authorities, namely:

- Signposting of instructions on the procedures to be followed in case of suspected infection, namely procedures established in DGS Guideline nr. 06/2020;
- Reinforcement of hygiene and disinfection measures, with their immediate activation to use by an occupant;
- Equipped with comfortable chairs, toilet with soap dispenser, paper towels and waste container.

Library and Meeting Room

These rooms will be used for internal face-to-face meetings or external corporate events, with the conditions defined in the previous points, namely:

- Ensure air circulation;
- Restrict the capacity to a minimum number of participants, ensuring a recommended safety distance of two meters between the chairs;
- Mandatory use of face masks;
- Reinforcement of cleaning and disinfection of the room, before and after its use.

José Mariano Gago Auditorium

The auditorium capacity will be reduced from 203 seats to a maximum occupancy of 56 seats available. Additionally, the following recommendations will be adopted:

- Mandatory use of a face mask by users;



- Reinforcement of cleaning, disinfection and hygiene of spaces and surfaces;
- Installation of automatic alcohol gel dispensers at the disposal of all users;
- Access to technical areas will be reserved for employees.

More details about this area in the annex “Organization of Events at the Pavilion of Knowledge - Ciência Viva Science Centre”

Atrium, Laboratory and Kitchen is a Laboratory

More details about this area in the annex “Organization of Events at the Pavilion of Knowledge - Ciência Viva Science Centre”.

A common orientation to all areas – air renewal

To increase air renewal, all ventilation and extraction systems will be turned on with full power during the entire period of opening to the public, allowing for total renewal of air 4 times per hour on average.

Windows, smoke detectors and doors, whenever feasible, must remain open.

Environmentally friendly solutions will be privileged. During hot weather, ventilation of the spaces will work at night for additional aeration of the rooms and natural acclimatization, minimizing the consumption of thermal energy.

Air extraction from bathrooms will be maintained 24hours/day.

Air filters have been replaced with new ones and will be periodically dry cleaned.

Daily, while the current plan is in force, the exchangers of all exhibition air treatment units will be disinfected using an appropriate product (Baksil), disinfecting the filters and ducts as well.

Cafeteria

This area is the object of a concession operated by an external company, and its reopening was guaranteed by the concessionaire, in strict compliance with the rules determined by the Government and health authorities for restaurants.





3. Annex

LIST OF TEMPORARILY DISABLED EXHIBITS PAVILION OF KNOWLEDGE - CIÊNCIA VIVA SCIENCE CENTRE

Total nr of exhibits: 160

Nr of exhibits temporarily disabled: 13

Location:

Explora Exhibition

Name of the exhibit:

Peripheral vision



Disappeared



Look to infinity



Pupil



Twilight of the eye



Location:

Balcony

Name of the exhibit:

Hands in the sand

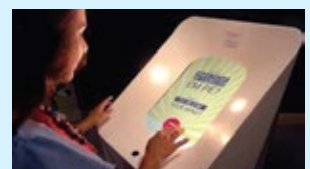


Location:

Atrium

Name of the exhibit:

Wind machine



Location:

Tcharan! Exhibition

Name of the exhibit:

The chatty puppet



Blue Factory



Unfinished House



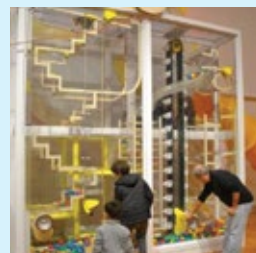
Frog tongue



Smells good, smells like memory



Giant machine
(climbing area and slides)



PAVILION OF KNOWLEDGE SHOP CIÊNCIA VIVA SCIENCE CENTRE

The Pavilion of Knowledge shop has an online sales service. To continue ensuring its physical operation, while protecting shop operators and visitors, reinforcement measures were taken. Regarding this public service area, all measures mentioned above in this document apply.

1. General procedures – store and operators

- // Presence in the shop is limited to two operators at the same time, one being alternately in the cashier and the other in the remaining areas of the store;
- // A physical separation barrier will be installed between the cashier and the user;
- // Mandatory use of a facemask, which can be complemented with the use of visors and gloves;
- // Reinforcement of cleaning, disinfection and sanitation of individual service stations, namely, after attending each customer, disinfecting the counter and automatic payment terminal with alcohol solution and paper (for single use);
- // Installation of automatic alcohol gel dispensers for use by operators and visitors;
- // After demonstrating an article, disinfect it with its solution and single-use paper, before placing it back;



- // Posting of general hygiene measures and respiratory label with recommended hand washing – procedure and frequency – using tissues (for single use) to blow, cough or sneeze into the forearm, sleeve or, preferably, to a tissue and to avoid touching the eyes, nose or mouth.

2. General procedures – visitors

- // Mandatory use of a facemask by users aged 10 or over;
- // Handling of products should be done, preferably, by the operator who is responsible for demonstrating their potential and functions;
- // Dress testings are suspended;
- // It is recommended to disinfect hands before entering the shop, using the dispensers available in the space for this purpose;
- // It is recommended to pay using automatic means, via ATM, Visa or MB-Way, avoiding handling of cash;
- // Access to the cashier is limited to a single user;
- // Capacity is reduced to guarantee a minimum distance of two meters between users;
- // The visitors waiting area is outside the store, ensuring the adequate separation distance between each visitor according to markings on the ground until the entry by an employee is authorized;
- // Users must circulate anti-clockwise.

ORGANIZATION OF EVENTS IN THE PAVILION OF KNOWLEDGE - CIÊNCIA VIVA SCIENCE CENTRE

All measures mentioned above in this document apply to this area, which was reorganized to reinforce the protection of employees and visitors, namely:

1. General procedures

- // All visits are subject to prior booking, with users being informed of the revised rules of use contained in this document;
- // Visits to the space for scheduling events must be carried out with the minimum number of external people, which must not exceed 3;
- // Organization of events is conditional to the number of participants defined by the revised capacity for each area, and access may be prohibited if the actual number of participants is greater than that initially announced;
- // The organization that rents the area(s) is responsible for keeping the Pavilion of Knowledge informed about all the event details;
- // Events that include meal/catering services must comply with the rules defined for restaurants, and it is mandatory to use the concessionaire of the Pavilion of Knowledge cafeteria. Exceptions will be duly analysed.
- // In preparatory visits and during events, the following rules are respected:
 - Mandatory use of facemasks; whenever possible, the recommended physical distance of 2 meters must be respected;
 - Mandatory measurement of body temperature when accessing the facilities for everyone involved (organization, support staff, speakers and other participants) using an automatic infrared fever detection device, to minimize skin contact;
 - Covid-19 symptom monitoring through body temperature measurement and confirmation of absence of respiratory symptoms (worsening of the usual cough and dyspnoea/breathing difficulty) at the time of entry, either through the security service door or through the ticket office (1st Floor) ;
 - In the presence of Covid-19 symptoms, including fever above 38 °C, access to the entrance will be prohibited;
 - The mandatory entry of participants and speakers by the ticket office on the 1st floor; only organizers can use the security entrance (CCL);

- // It is forbidden to use the service elevator, which is reserved for the movement of materials and equipment;
- // Placement of alcohol gel dispensers at the entrance of spaces and other strategic locations, ensuring that dispensers are loaded regularly and have the necessary maintenance;
- // Reinforcement of the hygiene and disinfection of all areas, including the moments before and after the event;
- // The organization of the event will guarantee the staff needed to avoid formation of crowds, including on the way to sanitary facilities on the 1st floor (ticket office corridor). If the organization does not have staff available for this function, Pavilion of Knowledge team will enforce this measure by integrating its cost into the event budget;
- // Ciência Viva reserves the right to cancel the event in case of non-compliance with the present recommendations, in which case there will be no refund or reduction of the agreed value.

2. Space capacity

Depending on the evolution of the Government and the General Directorate of Health guidelines, the capacity of the areas may change. In this initial phase, taking into account the characteristics of each areas, the following capacities were revised:

José Mariano Gago Auditorium

- Pre-pandemic capacity: 203 seats
- Maximum capacity: 56 seats
- Recommended seating: 23 seats



Atrium

- Pre-pandemic capacity: 420 pax
- Recommended capacity: 21 pax

Biblioteca*U layout*

- Pre-pandemic capacity: 25 seats
- Maximum capacity: 9 seats
- Recommended: 7 seats

Audience layout

- Pre-pandemic capacity: 64 seats
- Maximum capacity: 16 seats
- Recommended: 9 seats

Classroom layout

- Pre-pandemic capacity: 31/73 seats
- Maximum capacity: 11 seats
- Recommended: 9 seats

Clock Room*U layout*

- Pre-pandemic capacity: 15 seats
- Maximum capacity: 7 seats
- Recommended: 5 seats

Audience layout

- Pre-pandemic capacity: 36 seats
- Maximum capacity: 10 seats
- Recommended: 5 seats

Classroom layout

- Pre-pandemic capacity: 19/34 seats
- Maximum capacity: 7 seats
- Recommended: 5 seats.

Kitchen is a Laboratory***U layout***

- Pre-pandemic capacity: 15 seats
- Maximum capacity: 7 seats
- Recommended: 3 seats

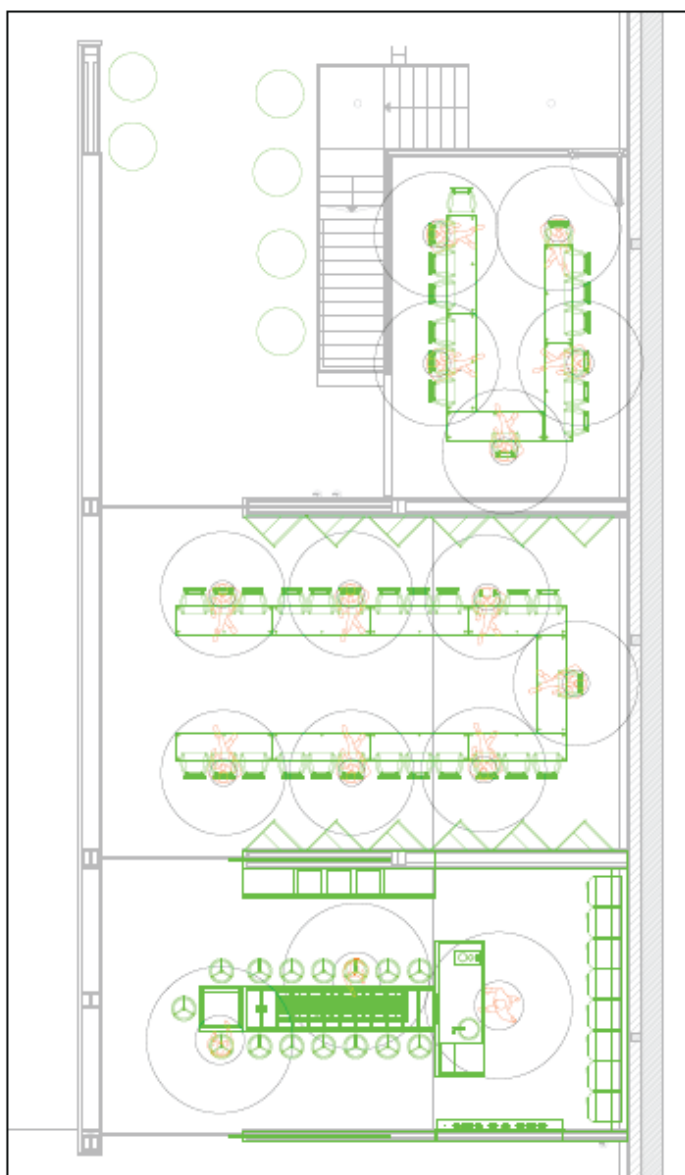
Audience layout

- Pre-pandemic capacity: 15 seats
- Maximum capacity: 7 seats
- Recommended: 3 seats

Classroom layout

- Pre-pandemic capacity: 15 seats
- Maximum capacity: 7 seats
- Recommended: 3 seats

U layout



CLOCK ROOM

33 m²
5 people
15 seats

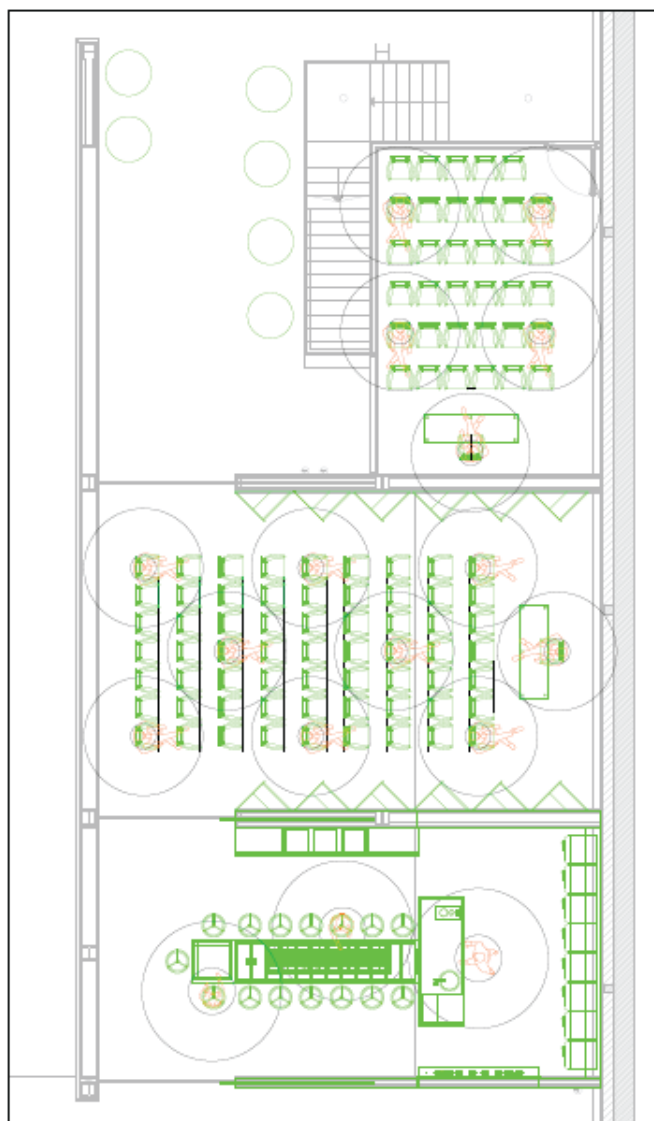
LIBRARY

72 m²
7 people
25 seats

KITCHEN IS A LABORATORY

57 m²
3 people
15 seats + 1 tutor

Audience layout



CLOCK ROOM

33 m²
5 people
36 seats

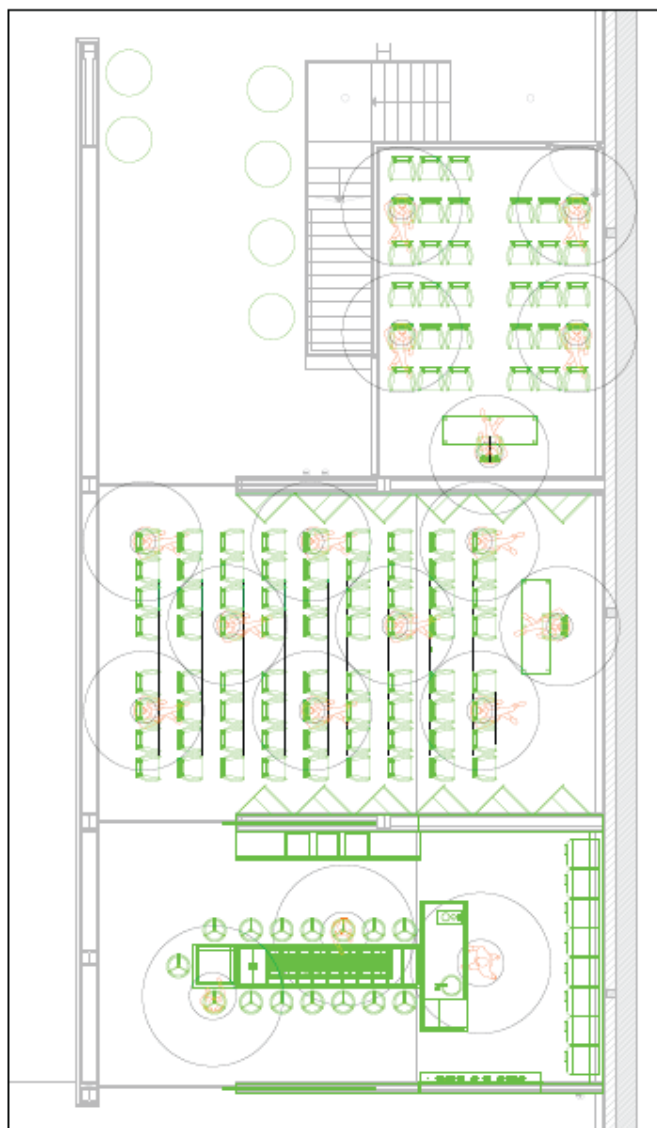
LIBRARY

72 m²
9 people
64 seats

KITCHEN IS A LABORATORY

57 m²
3 people
15 seats + 1 tutor

Classroom layout



CLOCK ROOM

33 m²
5 people
34 seats

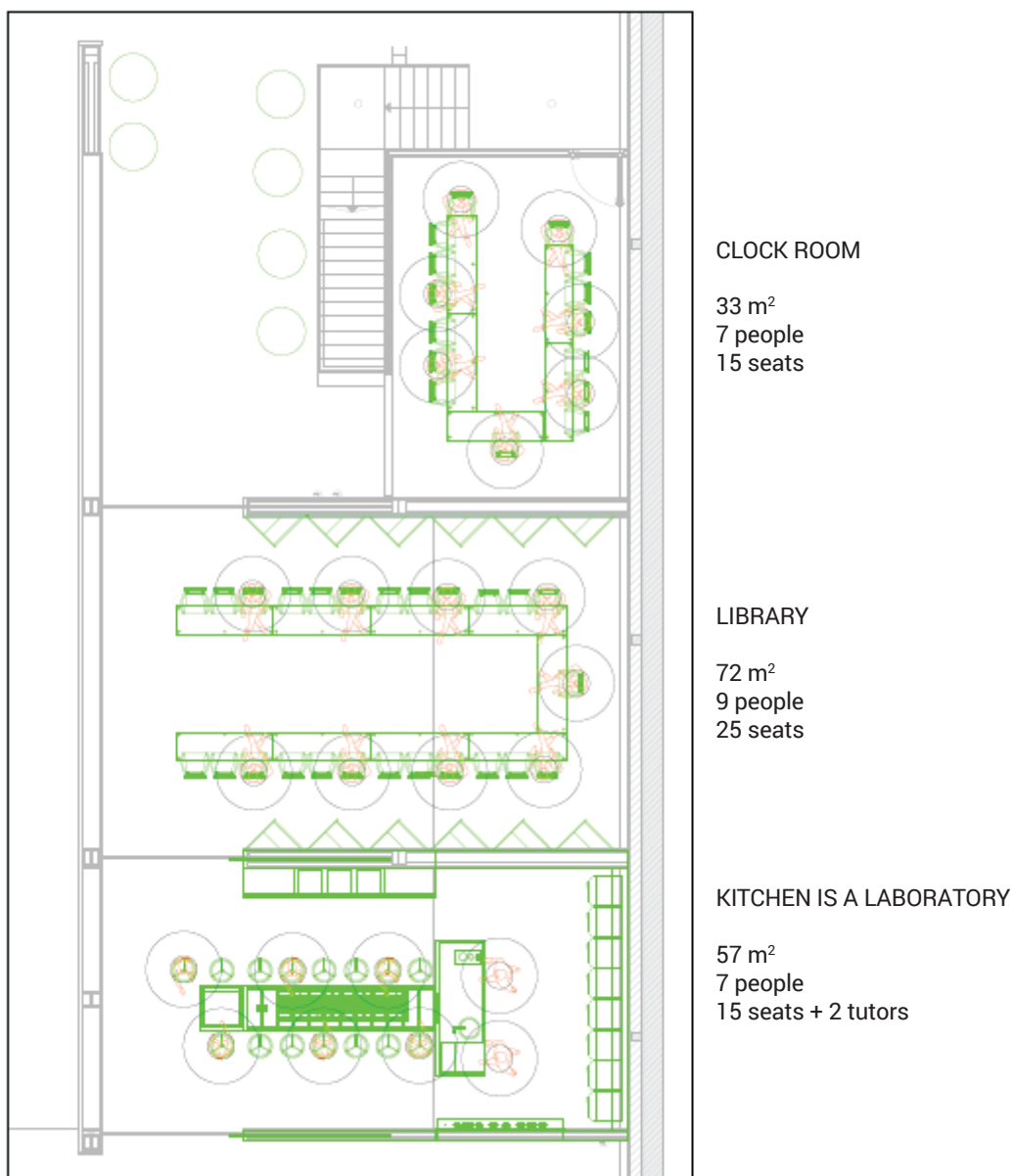
LIBRARY

72 m²
9 people
73 seats

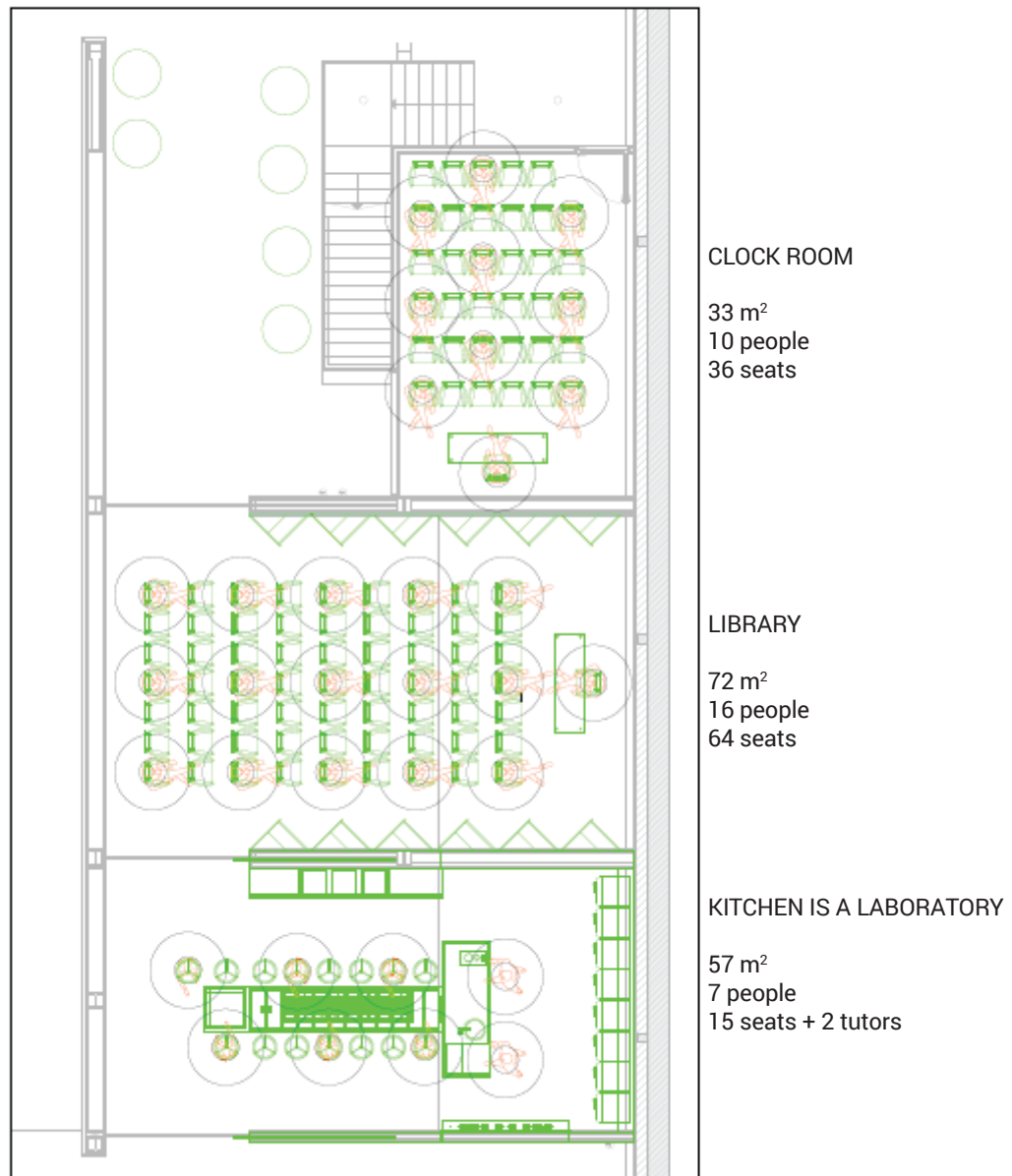
KITCHEN IS A LABORATORY

57 m²
3 people
15 seats + 1 tutor

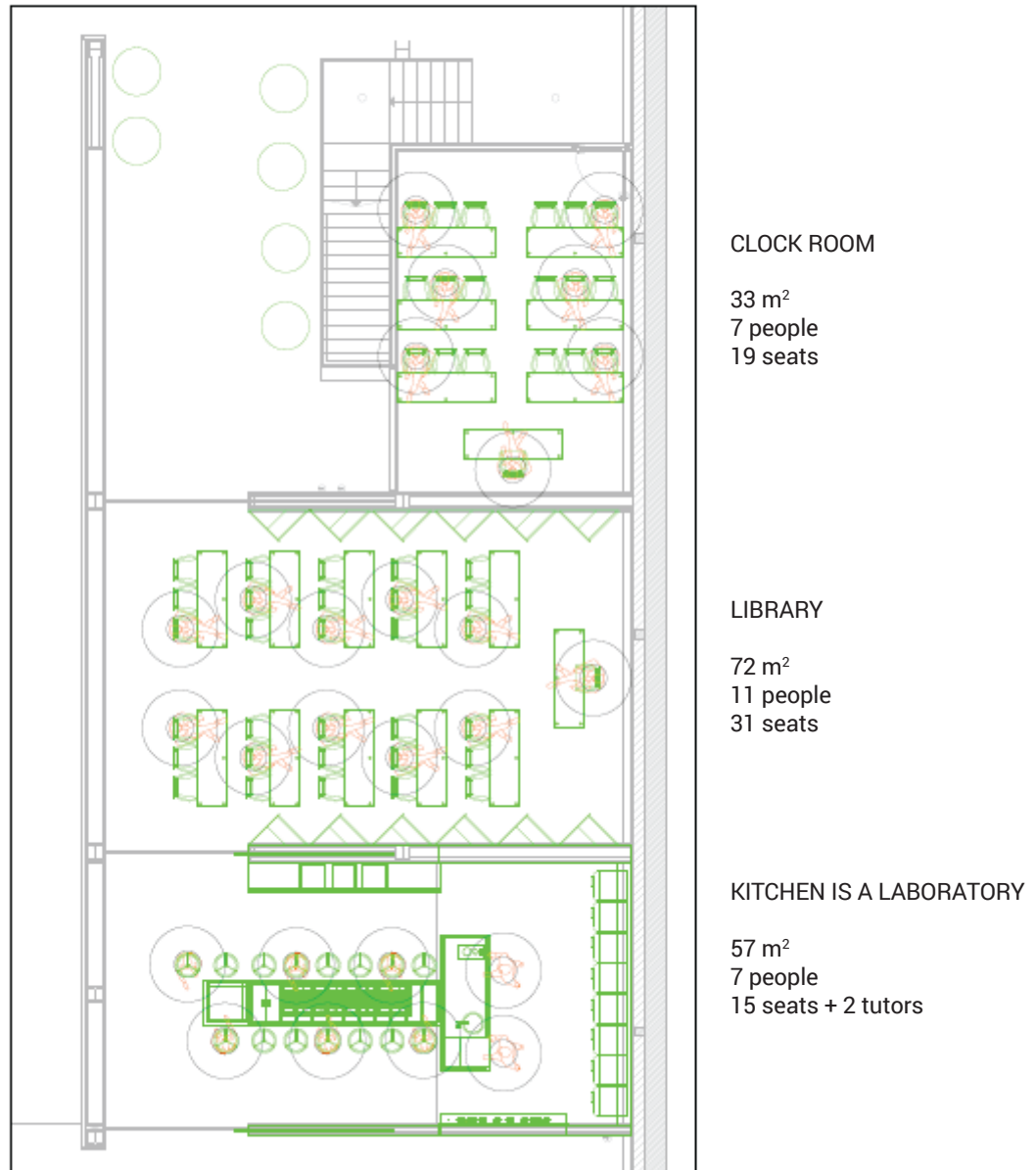
U layout



Audience layout



Classroom layout





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