

In light of the rapid spread of SARS-CoV-2 within the national territory, and in compliance with several Ministerial and Rectoral Decrees, UniPD – just like any other educational institution in Italy – was forced to suspend in-person classes as of late February 2020. As a result of it, in order to ensure student progression while upholding academic standards, a number of teaching-related measures had to be implemented, ranging from the need to make online classes increasingly available to the reorganization of Tirocinio activities.

In order to explain in detail measures adopted by the VEE of UniPD, the following key points will be discussed:

1. Transition from traditional, face-to-face classes to online classes;
2. Reorganization of Tirocinio activities;
3. Veterinary Teaching Hospital;
4. Revision of (some) existing standard operating procedures;
5. Return-to-work phase;
6. Admission test
7. Challenges and opportunities identified during the lockdown.

1. Transition from traditional, face-to-face classes to online classes

In compliance with the numerous Ministerial and Rectoral decrees (for a list of Covid-related updates in Italian, please visit <https://www.unipd.it/coronavirus-comunicazione-rettore>), including the “SARS-CoV-2 Containment and Contrast Actions Protocol” drafted by UniPD and published on 5 May 2020 and subsequent amendments (https://www.unipd.it/sites/unipd.it/files/2020/ProtocolloCovid_fase2_aggiornamento_eng_DEF.pdf), each learning institution was asked to reorganize teaching by making training material and courses available

online. While on the one hand this allowed to limit unnecessary intercity and/or interstate travel, including person-to-person contact, on the other hand it guaranteed that students could continue their studies effectively from home. In this regard, it is worth mentioning that because a great number of teachers already used online platforms and resources well before the pandemic, the entire transition process – however demanding and sometimes difficult – was pretty smooth and rapid.

Lessons and practicals

The second semester was scheduled to start on 2 March 2020. Initially, following the decision on 22 February to suspend teaching activities, UniPD had decided to postpone the start of lessons for a week. As a result, teaching activities officially started on 9 March 2020; however, with the lockdown being extended, the entire semester (until June) was delivered online (Moodle platform) through both synchronous and asynchronous teaching, according to teachers' preference. All teachers involved worked toward implementing such a teaching approach, thus preventing the student's career progression from slowing down or being suspended. Teachers' feedback, which so far has only been gathered at the degree-course level (University outcomes on teaching assessment are not yet available), was very positive.

Practicals were also carried out online, whenever possible. All practicals scheduled to take place during the second semester, including information on the number of activities that were entirely transitioned to an online format, as well as activities that could not take place online (i.e. *hands-on*), were recorded in a file. It was decided to postpone

activities that could not be delivered online to the following academic year, while maintaining the time slot allocated for one given subject (e.g. *skills taught within third-year animal husbandry were transferred to fourth-year animal husbandry, without further increasing the number of hours planned for that year*).

Practicals scheduled to take place during the second semester of fifth year (elective courses only) were delivered online, ensuring the achievement of learning objectives.

Exams and graduation sessions

All exams, including those scheduled during the Summer Session, were held online using the Zoom platform.

With regard to the writing of dissertations, the University's objective was to ensure students could complete their studies within the prescribed times. For this, teachers were asked to facilitate the completion of thesis with adequate bibliographic researches or similar in place of experimental data, which was difficult to gather during the lockdown.

Veterinary medicine graduation sessions planned to take place between the end of February (i.e. when teaching activities were suspended) and July 2020 were held online using the Zoom platform.

Similarly, exams scheduled during the Fall Session (17 August - 19 September) are currently being held online or in person, depending on the course. Students must check on the School's website or the website of their teaching institution the exam format in place.

Online exam sessions must be guaranteed (upon reasonable requests) for international students, students from outside the Veneto region who cannot be in Padova and students

with particular medical conditions for which increased safety measures are required.

In-person exams will be scheduled by each teaching institution in a way that allows for rooms to be booked and used while ensuring health safety measures are complied with.

The Fall graduation session will be held in person according to the procedures identified by each teaching facility and in compliance with safety protocols (e.g. maximum number of attendees per graduation ceremony).

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2. Reorganization of *Tirocinio* activities

Initially, during an online meeting held on 27 March 2020, the *Tirocinio Committee* had identified two different scenarios:

Scenario A: among the range of activities included within one area, a distinction should be made between activities that can be delivered online (aiming for the highest possible number given the emergency) and activities that can only take place in person due to their *hands-on* nature.

Scenario B: due to the current emergency situation, all *Tirocinio* activities related to one area shall be transferred to an online format.

As the pandemic continued, and in accordance with decisions made by the Board of Administration and the Academic Senate during meetings on 7 and 8 April 2020 and the decision adopted by the DCC of the Single Cycle Degree Course in Veterinary Medicine on 13 May 2020, it was decided that all

veterinary medicine tirocinio activities were to be delivered online only.

Conversion and registration methods of online tirocinio activities

Every week, each contact person for the various areas of tirocinio activities was asked to identify in detail the procedures for the carrying out of tirocinio so that timetables could be reorganized accordingly and communicated to students.

Each learning area identified a range of online activities that were offered as an alternative to in-person activities. Such activities ensured that students could meet the minimum learning objectives and acquire the relevant skills.

Distance learning activities could include tutorial videos of practical procedures, focusing specifically on *problem solving*, case studies, explanatory videos, etc. or activities in which students could develop concepts on their own. This prevented theoretical lectures from being delivered as a replacement to practical activities.

With tirocinio activities being delivered online, students must only tick items completed (a verification by teachers is required) in their electronic logbook. For checkboxes that are unticked, the reference teacher for the relevant tirocinio area is asked to submit a document certifying the completion of activities, including information on how they were performed and the number of participating students (specimen of certification to submit). This has allowed the President of the Degree Course to register the tirocinio-related ECTS.

A file containing detailed information on items included in the electronic logbook, as well as activities moved to online formats and

non-convertible activities (due to their hands-on nature), is available.

However, despite many activities were transitioned to online teaching without hindering the acquisition of expected skills, others (i.e. *hands-on*) could not be transitioned to online formats.

It was therefore decided to postpone such activities to the following academic year, while maintaining the time slot allocated for any given subject (e.g. *skills taught within third-year animal husbandry were transferred to fourth-year animal husbandry, without further increasing the number of hours planned for that year*).

It is clear that activities planned throughout the fifth year could not be postponed, especially in light of UniPD instructions based on which no delays were allowed in student's career progression. For these activities, the following measures were implemented:

- Following the request submitted by UniPD, in-person tirocinio activities were resumed in June 2020. In-person activities were limited to those taking place within the VTH, and more specifically to the emergency tirocinio (night and week-ends), with only one student being allowed per shift.

- In-person tirocinio at the Local Health Authorities (Asl) was also resumed in that period, where possible.

- Starting from the end of August, students were allowed to choose (on a voluntary basis) whether they wanted to carry out the extra-mural clinical tirocinio on ruminants in person.

With regard to intra-mural activities, including extramural activities other than activities on ruminants, it was not possible to reschedule them in September.

It shall be noted that to enter premises (VTH and external premises) students are required to complete a self-declaration form stating that they have neither tested positive for Covid-19 nor had flu-like symptoms in the two weeks prior to accessing University grounds.

3. Veterinary Teaching Hospital

During the Covid-19 emergency, the Veterinary Teaching Hospital (VTH) has continued to operate, providing urgent care and emergency services. However, in order to protect its clients, staff and the general public, significant restrictions have been put in place. In particular, the following measures have been adopted:

- Access to the facility has been limited to staff only;
- Pet owners are asked to call to set up an appointment before coming to the VTH for veterinary services;
- A stringent admission/discharge protocol continues to be followed so as to minimize contact between clients and staff members;
- Upon arrival at the VTH, clients will be met in the parking lot by the medical staff, who will take the pet's history and bring the pet inside for further evaluation and/or treatments. The owner must wait outside.
- In addition to the cleaning and disinfecting protocols already in place, the frequency of disinfecting practices has further increased;
- Both staff and clients are required to wear a mask at any time while on premises.

Finally, it is worth reminding that in-person clinical activities involving the participation of students were resumed in June 2020. For this, the number of students allowed on

premises per time slot was reduced, as per existing regulations.

4. Revision of (some) existing standard operating procedures;

As of March 2020, UniPD has been implementing specific standard operating procedures (SOPs) for the management of live animals, in accordance with governmental guidelines issued in response to the Covid-19 crisis (https://www.agrariamedicinaveterinaria.unipd.it/sites/agrariamedicinaveterinaria.unipd.it/files/ALL.1_2.pdf). Specific procedures governing staff and student access to university grounds (offices and laboratories) are currently in place and kept up to date (<https://www.unipd.it/news/coronavirus>).

5. Return-to-work phase

For the so-called *return-to-work phase*, UniPD has been working towards ensuring that adequate social distancing is maintained so as to prevent overcrowded conditions and guarantee the student safety. Where this is not possible, the number of students per group has been further decreased and the use of high-level PPE (e.g. FFP2 face masks) made compulsory.

Lesson and practicals

For courses starting in Fall Semester 2020, each teaching facility was asked to choose which of the following teaching approach they wanted to adopt:

1. **Dual learning:** a learning model comprising face-to-face classes that are simultaneously streamed live so as to prevent overcrowded conditions;

2. **Blended learning:** a learning model comprising both face-to-face and remote classes;

3. Face-to-face learning only (e.g. laboratory and practical activities, etc.): a learning model comprising face-to-face classes only;

4. Online learning only: a learning model comprising remote classes only.

With regard to the Single Cycle Degree Course in VM, it was decided to adopt teaching approach no. **1** for fourth- and fifth-year students, and teaching approach no. **2** for first-, second- and third-year students.

Given its particular teaching features, the degree course in VM was given priority in terms of the number of veterinary students allowed in the School. For this, in order to ensure in-person classes for fourth- and fifth-year students, the two largest classrooms on Campus were made available (*Corte Benedettina* and *Aula Magna* for fourth and fifth year, respectively).

In order to track students' movements between classes, the *OrariUnipd* app will be used. The app is also linked to the Easy Badge software.

Finally, in addition to social distancing and the use of PPE, the so-called “*Sorveglianza Attiva*” (*active surveillance*) programme has been launched with the aim of identifying new possible hotspots of infection and implement the necessary containment measures. As part of the programme, a saliva swab will be collected from teachers and technical-administrative staff who wish to do so.

Exams and graduation sessions

In-person exams and graduations sessions will be resumed, as per University guidelines (self-declaration form, social distancing, use

of a face mask, frequent use of hand sanitizers).

Tirocinio

Given the small number of in-person classes for the first three years (which have been limited to practicals), the tirocinio has been postponed entirely to the second semester.

All other tirocinio activities (fourth and fifth year) will be offered in person by reducing the number of students per group (plus a supervising teacher). Specific safety measures will, of course, be implemented (self-declaration form, social distancing, use of FFP2 face masks, frequent use of hand sanitizers).

5. Admission test

In compliance with both national and regional provisions to prevent the spread of Covid-19, this year's veterinary medicine admission test (see cover picture¹) was held on the premises of *Ente Fiere di Padova*, where different pavilions were made available so as to ensure adequate social distancing. Furthermore, to avoid overcrowded conditions, candidates were divided in several groups based on date of birth and given specific instructions on how to enter premises. In order to be admitted to sit the test, candidates were asked to submit a self-declaration form stating that they neither tested positive for Covid-19 nor had flu-like symptoms in the fourteen days before the test date.

In addition to benefiting from the numerous scholarships UniPD makes available for newly enrolled students every year, a further 15 million euros have been allocated for student financial relief. In particular, students may

wear a face mask and desks are arranged so as to ensure adequate social distancing.

¹ The cover picture was taken on 1st September and shows a view from above of the pavilion. All students

apply to receive education discount pricing on computers, free internet connection, as well as concession fares on public transport services (for more information, please visit <https://www.unipd.it/contributi-straordinari-20-21>).

6. Challenges and opportunities identified during the lockdown.

UniPD has been involved in training projects, including the development of new teaching methods (e.g. *Teaching4Learning*), for several years now. This has also been possible thanks to the use of multimedia teaching tools (Digital Learning & Multimedia Office) by a great number of veterinary medicine teachers.

This notwithstanding, the COVID emergency declared in March 2020 led to a sudden change in the way teaching is delivered, with teachers being asked to adopt new teaching approaches mostly supported by online means.

As such tools are increasingly being used, the possibility of studying and developing new teaching approaches have become a reality. In fact, not only can these tools be used during emergency situations, but also in the near future with the aim of further enhancing the accessibility and quality of the veterinary medicine training programme.

In general, the following opportunities have emerged:

- Increased use of already existing teacher-student teaching aids (*Moodle*, *mediaspace*, etc.)
- Increased use of online tools (e-book, websites, etc.)
- Update of teaching materials available to teachers (text books, documents, articles, platforms)
- Implementation of online resources and courses offered by the campus library

- Development and implementation of already existing training courses on the use of multimedia tools for teachers
- Installation of in-classroom multimedia resources for the video recording of teaching activities
- Development of new and implementation of already existing training courses on new teaching approaches (supervised teaching, problem-based learning, etc.)
- Development of new technological tools for learning assessment
- Improvement of communication and coordination between teachers involved in common teaching activities (e.g. fourth- and fifth-year streams involving multiple teachers)

Furthermore, over the past few months the single cycle degree course in VM has also submitted – through its department (MAPS) – two proposals for innovative teaching as part of the initiatives for the improvement of teaching promoted by UniPD. These projects include:

- Creation of a specific *MediaSpace* channel, *VetMediaSpace*, to improve the career and performance of veterinary students, while further enhancing the course's international stand (University call for financing recruitment proposals – Strategic Teaching – Year 2020, currently undergoing evaluation)
- “E-look and e-learn”: Innovative learning and continuing education tools for additional teachers employed in teaching activities offered by MAPS, including compliance with EAEVE accreditation standards (Call for projects for the improvement of teaching – Year 2020, accepted)

These projects include several objectives, among which it is worth mentioning the following:

- The creation of *VetMediaSpace* will allow to overcome overlapping between classes, practicals and tirocinio. In this regard, it shall be noted that the heavy teaching load of the veterinary medicine course had already been pointed out by the EAEVE visitation team back in February 2020.

- Activities planned within the *VetMediaSpace* project will be directed primarily towards teaching activities linked to farm animals and equines.

- The possibility of making learning material available both in Italian and English will attract a higher number of international and Erasmus students.

- The possibility of accessing online learning materials via the portal will facilitate outbound student flows (Erasmus).