# 28413 - IT Tools for Vets

## Syllabus Information

**Academic Year:** 2019/20
**Subject:** 28413 - IT Tools for Vets
**Faculty / School:** 105 - Facultad de Veterinaria
**Degree:** 451 - Degree in Veterinary Science
**ECTS:** 3.0
**Year:** 2
**Semester:** First semester
**Subject Type:** Optional
**Module:** ---

# 1.General information

## 1.1.Aims of the course

The general goal of this subject is to ensure that students acquire basic skills in the use of computer tools that they will certainly need both in their academic and professional life, thus facilitating the transmission of their own knowledge in the disciplines of the degree.

In addition, the students are encouraged to participate actively in their learning process, involving them in it and moving them away from the mere role of passive observers.

## 1.2.Context and importance of this course in the degree

Due to the instrumental nature of this subject, the passing of this discipline must enable students to follow the rest of the specific subjects of the degree.

## 1.3.Recommendations to take this course

Students must have taken all the first year subjects and be enrolled in those that have not been passed.

# 2.Learning goals

## 2.1.Competences

On successful completion of this course, students will be able to:

- Make communication more correct and effective, both orally and in writing.
- Master the computer applications related to the field of study, as well as the use of the Internet as a means of communication and a source of information.
- Improve the ability to organize and plan independently work and information management.
- Improve time planning and management.
- Design and manage projects, enhancing critical capacity, analysis and synthesis, as well as decision making

## 2.2.Learning goals

If students complete the course successfully, they should be able to

1. Use basic computer tools.
2. Use a word processor for writing and reporting.
3. Use a word processor to do small layouts.
4. Search for and manage information related to the professional activity of the veterinarian.
5. Design and manage a website at a basic level.
6. Design a presentation to spread fluently in an oral way the information obtained during the professional exercise.
7. Present and defend a project orally.
8. Use some specific software of veterinary application, particularly, to interpret and to raise different statements

corresponding to real situations within the field of the linear optimization, interpreting the obtained solutions

### 2.3.Importance of learning goals

They contribute to the training of students to face the rest of the more specific subjects of the degree in better conditions, being able to carry out a better treatment of the information they need.

On the other hand, the strengthening of generic or transversal competences of an instrumental, interpersonal and systemic type will contribute, together with the rest of the subjects, to the integral formation of future Veterinary Graduates.

## 3.Assessment (1st and 2nd call)

### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

**Evaluation activities**

The student must demonstrate that has achieved the intended learning outcomes through the following assessment activities

1. .Evaluation of the skills and abilities acquired in the practical classes carried out in the computer room through the continuous observation of the student's work and the correction of the documents generated in each practice. Alternatively, for those students who have not attended all the practices, this evaluation will be carried out in the official announcements on the dates set for this purpose by the Centre, with a duration of 2 hours. The grade will be from 0 to 10 and will represent 35% of the student's final grade in the subject. Some of the computer tools used will involve the use of programs in English. Passing these tests will contribute to accrediting the achievement of learning outcomes 1, 2, 3, 4, 5, 6 and 8.
2. .Evaluation of computer classroom practices. The student will have to solve in an individual way analogous situations to those worked in the practical classes. It will be carried out in the official announcements in the dates destined for this purpose by the Centre, with a duration of 3 hours. The grade will be from 0 to 10 and will represent 35% of the student's final grade in the subject. Some of the computer tools used will involve the use of programs in English. Passing these tests will contribute to accrediting the achievement of learning outcomes 1, 2, 3, 4, 5 and 6.
3. .Evaluation of the skills and abilities acquired in the design and oral presentation of a final subject project. This evaluation will be carried out in the official announcements on the dates assigned for this purpose by the Centre. The works can be done individually or in pairs, and there will be 10 minutes for their presentation. Each student must present their work and listen to the work of their classmates, so the duration of the session cannot be determined. The grade will be from 0 to 10 and will represent 30% of the student's final grade in the subject. Some of the computer tools used will involve the use of programs in English. Passing this test will contribute to accrediting learning outcome 7.

Although the three tests will take place on the dates indicated in the calendar of examinations drawn up by the centre, tests 1 and 2 will be convened additionally during the course of the school year, specifically during the course of the practice sessions. If a score of 5 out of 10 is obtained in each test, the test will be passed. The qualification obtained in these tests will be maintained in successive seasons.

**Valuation criteria and requirement levels**

The attitude of the student will be taken into account in the face-to-face sessions, as well as the capacity for critical reasoning and the application of theoretical knowledge to the analysis of situations, problem solving and decision making in real contexts. Likewise, the mastery of computer applications related to the field of study will be valued, as well as the use of the Internet as a means of communication and source of information.

In order to pass the subject, the student must achieve at least 50% of the grade in each of the first two assessment activities mentioned above.

**Marking system:**

According to the national regulation Law 1025/2003, 5th of September which lays down the European system of credits and marking system for the university degree.

0-4,9: FAIL.

5,0-6,9: PASS

7,0-8,9: GOOD (NT).

9,0-10: EXCELLENT (SB).

As the article 158 of the Statutes of the University of Zaragoza lays down, provisional grades will be displayed at least for 7 days and students will be able to review them on the date, time and place provided for that purpose.

## 4.Methodology, learning tasks, syllabus and resources

### 4.1.Methodological overview

The course is structured in 3 ECTS credits. Each student will receive 10 hours of face-to-face lectures format and another 20 hours of practice in the computer room.

In relation to lectures, the corresponding 10 hours will be dedicated to expose and debate the usefulness of the computer tools included in the program, presenting the different possibilities and options of use. The necessary documentation will be lodged in advance in a virtual course to which the students will have access during the whole course. In this way, the student can review it in detail before and after the corresponding class. Thanks to the tools used in the configuration of the virtual course, the materials are perfectly organized in each part into which the subject is divided. In general, the aim will be to encourage participation in class by means of interactive activities on the functioning of computer utilities.

The practices will be carried out in the computer room in two-hour sessions. For each computer tool, there will be several sessions where the computer tools included in the program will be put into practice. In addition, for each computer tool, there will also be a two-hour practice in the computer room, where the student will have to solve individually situations similar to those worked on in both the master classes and the practice classes. As in the theoretical part, the virtual course will house the scripts and aids for the realization of these practices and it will be there where the students will have to lodge the documents generated in each practice for its later evaluation.

For both the theoretical and practical parts, in addition to the face-to-face tutorials, the messaging and news system offered by the virtual course is used to maintain permanent contact with the students.

## 4.2.Learning tasks

**Microsoft Word**

Descriptors: The Word environment. Basic edition. Document format. Styles. Page design. Tables. Images and graphics. Organization charts and diagrams.

*Competences:*

Know how to use a word processor to write and present reports. To be able to format a text from an flat document. Make layouts with a word processor.

*Teaching-learning activities: 0.44 ECTS*

- Internship in a computer room: 2 internships of 2 hours each.

- 5 hours of autonomous work by the student. Within these hours, the possible attendance to individualized tutorials is taken into account.

*Evaluation:*

There will be a practice in the computer room at the end of this block of 2 hours, where the student will have to solve individually situations similar to those worked in the practice classes.

**Internet: searches and design of Web pages**

Descriptors: Internet descriptors. Search criteria. Database searches. Web page design.Web site hosting.

*Competences:*

Knowing how to manage the different Internet search directories. To define criteria of searches in the Net to delimit the results. Know how to search databases on the Web. Manage the information found on the Internet. To be able to design and manage a Web site.

Knowing how to master the different computer applications related to the field of study, as well as the use of the Internet as a means of communication and a source of information.

*Teaching-learning activities: 0.44 ECTS*

- Internship in a computer room: 2 internships of 2 hours each.

- Study by the student: 5 hours of autonomous work by the student. Within these hours, the following are counted possible assistance to individualized tutorials.

*Evaluation:*

There will be a practice in computer room at the end of this block of 2 hours, where the student must to solve individually situations analogous to those worked in the classes of practices.

**Multimedia Presentation Design: Microsoft PowerPoint**

Descriptors: Environment and first steps. The views. Working with slides. Handling objects. Working with texts. Speaker's notes. Working with images, tables, graphs, diagrams. The drawing bar. Multimedia elements. Animations and transitions. Working in projection mode.

*Competences:*

Knowing how to design a multimedia presentation. Correctly manage the tools of a presentation. To be able to expose and defend a project orally.

Teaching-learning activities: 0.60 ECTS

-Lectures: 4 h (the contents of the descriptors will be worked on). The aim is to encourage participation in class through learning based on interactive demonstrations.

- Computer classroom practice: 2 practices of 2 hours each for the implementation of the explanations made in the master classes.

- Study by the student: 5 hours of autonomous work by the student. Within these hours, the possible attendance at individualized tutorials is taken into account.

*Evaluation:*

There will be a practice in the computer room at the end of this block of 2 hours, where the student will have to solve individually similar situations to those worked in the lectures and practice seasons.

**Specific veterinary application software (Linear Programming for veterinarians):**

Descriptors: Introduction to Linear Programming. General Linear Programming Model. Approach of problems of linear

optimization with restrictions. Cattle rationing.

*Competences:*

Knowing how to identify a problem of linear optimization with restrictions. Be able to raise this type of problems in contexts specific to veterinary activity. To handle in a correct way specific software for the resolution of problems of Linear Programming.

*Teaching-learning activities: 0.44 ECTS*

- Lectures: 6 h (the contents of the descriptors will be worked on). The aim is to encourage participation in class through learning based on interactive demonstrations.

- Computer classroom practice: 1 practice of 2 hours to put into practice the explanations given in the master classes.

- Study by the student: 5 hours of autonomous work by the student. Within these hours the possible attendance to individualized tutorials is counted.

*Evaluation:*

The different written tests that will be proposed during the lectures will be collected.

**Specific veterinary application software (Linear Programming for veterinarians):**

Descriptors: Introduction to Linear Programming. General Linear Programming Model. Approach of problems of linear optimization with restrictions. Cattle rationing.

*Competences:*

Knowing how to identify a problem of linear optimization with restrictions. Be able to raise this type of problems in contexts specific to veterinary activity. To handle in a correct way specific software for the resolution of problems of Linear Programming.

Teaching-learning activities: 0.44 ECTS

- Master classes: 6 h (the contents of the descriptors will be worked on). The aim is to encourage participation in class through learning based on interactive demonstrations.

- Computer classroom practice: 1 practice of 2 hours to put into practice the explanations given in the master classes.

- Study by the student: 5 hours of autonomous work by the student. Within these hours the possible attendance to individualized tutorials is counted.

*Evaluation:*

The different written tests that will be proposed during the lectures will be collected.

**Realization and defense of a final project of subject Competences:**

Knowing how to design a project that includes the use of a computer tool. To be able to expose and defend this project orally. Know how to manage time.

*Teaching-learning activities: 1 ECTS*

- Exhibition and defence: 5 hours in person. You will have about 10 minutes for each job. Each student will have to present their work and hear that of their classmates, so the duration of the session will be five hours.

- Preparation of the project by the student: 20 hours of autonomous work by the student. Within these hours, the possible attendance at individualized tutorials is taken into account. Work can be done individually or in pairs.

*Evaluation*

Both the design of the project and its exposure and defense will be assessed.

**Summary table of teaching- learning activities**

| Activities | hours |
|---|---|
| Lectures | 10 |
| Practice sessions | 20 |
| Autonomous work and study | 40 |
| Assessment | 5 |
| TOTAL | 75 |

## 4.3.Syllabus

Microsoft Word

**Descriptors:** The Word environment. Basic Edition. Document Format. Styles. Page design. Tables. Images and graphics. Flowcharts and diagrams.

Internet: search and web design

**Descriptors:** Descriptors Internet. Search criteria. Searches databases. Web pages design. Hosting websites.

Design multimedia presentations: Microsoft PowerPoint

**Descriptors:** Environment and first steps. The views. Working with slides. Handle objects. Working with texts. Speaker notes. Working with images, tables, graphs AND diagrams. The bar drawing. multimedia elements. Animations and transitions. Working in Slide view

Specific veterinary application software (Linear Programming):

**Descriptors:** Introduction to Linear Programming. General linear programming model. Approach linear optimization problems with restrictions. Linear Programming and Livestock ration formulation.

## 4.4.Course planning and calendar

As it is an optional subject, only the schedule of the lectures will be programmed by the Center. In order to design the calendar of the practical classes it will be necessary to know in advance the calendar of the rest of the core subjects in order to find the gaps where to place those sessions. With this premise, it will be tried that the sessions are distributed in a uniform way throughout the semester.

The dates and key milestones of the subject are described in detail, along with the rest of the subjects of the second year in the Veterinary Degree, on the website of the Faculty of Veterinary Medicine (link: http://veterinaria.unizar.es/gradovet/). This link will be updated at the beginning of each academic year.

The dates and key milestones of the course are described in detail, together with the rest of the subjects of the second year in the Veterinary Degree, on the website of the Faculty of Veterinary Medicine (link: http://veterinaria.unizar.es/gradovet/). This link will be updated at the beginning of each academic year.

## 4.5.Bibliography and recommended resources

http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=28413