

COURSE: Organic farming and animal welfare

ACADEMIC YEAR: **2017-2018**

TYPE OF EDUCATIONAL ACTIVITY: Basic

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Language: Italian

ECTS: 6 (5 credits: lessons; 1 credit: seminars, farm and laboratory practice)	n. of hours: (lessons e tutorials/practice) 40 lessons 16 seminars, farm and laboratory practice	Campus: Potenza School: SAFE Program: MSc Agricultural Science and Technology	Semester: first
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#### EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The aim of the course is providing basic knowledge on organic and sustainable animal farming. In addition, the course aims to supply the appropriate information for a reliable evaluation of the impact of farms on the behaviour and welfare of the animals kept for farming purposes. At the end of the course, the students will be able to apply the main organic farming techniques and perform the assessment of the impact of intensive and extensive farming techniques on animal behavior and welfare. In addition, they will know the main tools needed to monitor the welfare of the animals at farm and individual level. The main positive and negative effects of different farming systems will be also recognized.

- **knowledge and understanding:** Knowledge of the main behavioral categories including social, reproductive, maternal and feeding behavior. Abnormal behavior such as stereotypies and aggressive behavior will be also studied. The students will receive detailed information concerning the protection of the animals at the farm and during transport and slaughter. The regulations concerning organic farming and its principles will be also described. Knowledge of the methods for the evaluation of animal welfare at individual and farm level (i.e. Welfare Quality, AWIN) will be the focus of the final part of the course.
- **applying knowledge and understanding:** Ability to assess the effect of various farming systems on the animals at individual and farm level, to identify potential risk factors for animal welfare with particular emphasis on the expression of abnormal behavior
- **making judgements:** At the end of the course, students will be able to understand the best technical choices to minimize the impact of various farming systems on the welfare state of the animals. They will also to be able to produce, in a critical and autonomous way, oral presentations or written reports on topics treated during the lectures.
- **communication skills:** Ability to communicate the effect of farming on the animals to both non-technical and technical audiences. Ability to exhibit, synthetically and effectively, using appropriate scientific and technical terms, a finalized work on issues concerning organic animal production, animal behavior and animal welfare. Ability to interact and communicate with farmers in the development and implementation of environmental and animal welfare friendly farming practices and products.
- **learning skill:** Ability to access and understand data on environmental impact and animal welfare of various farming systems. Ability to access technical and scientific data and summarize them.

#### PRE-REQUIREMENTS

A basic knowledge concerning animal production is required

#### SYLLABUS

CFU-1 (8 h, lectures): Natural behaviour

Description of the main behavioral categories including social (hierarchy formation and maintenance, dominance relationships, factors affecting dominance, dominance indexes and measures), reproductive (search of the partner, and activity level, hormonal control of the behaviour) , maternal (onset of maternal behavior and hormonal control, parents – offspring conflict and weaning age) and feeding behavior (forage selection and intake) in different farm animal species.

CFU-2 (8 h, lectures): Abnormal behaviours

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The effect of various farming systems (e.g. intensive and extensive) on the expression of animal behavior will be studied. Abnormal behavior such as stereotypies, as a consequence of frustration, and aggressive behavior will be also described and risk factors elucidated.

CFU-3 (8 h, lectures): Welfare assessment

The attention will be focussed on welfare assessment at individual and farm level. The main indicators (animal based, resource and management measures) to be used for reliable on farm welfare assessment will be described. The main welfare assessment tools will be explained and particular emphasis will be given to those scientifically validated (i.e. Welfare Quality, AWIN).

CFU-4 (8 h, lectures): Rules on organic farming and animal welfare

EU directives and regulations on the protection of animals on farm and during transport and slaughter will be illustrated along with the main regulations on organic farming.

CFU-5 (8 h, lectures): Organic farming

The farming techniques of the main animal species, including dairy and beef cattle, dairy buffaloes, sheep and goats, rabbits, laying hens and broilers) will be described

CFU-6 (8 h, lectures): Practices

Seminar, laboratory and farm practice will be conducted in order to acquire the ability to assess the effect of various farming techniques on animal welfare and on the environment.

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#### TEACHING METHODS

Theoretical lessons (40 hours), seminars, laboratory and farm practices (16 hours). The maieutic approach will be followed.

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#### EVALUATION METHODS

Oral examination, based on the assessment of theoretical knowledge and laboratory practices.

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#### TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

On line educational material available at <https://elearning.unibas.it/course/view.php?id=39>

Textbooks:

- F. Napolitano, G. De Rosa, F. Grasso. 2007. Comportamento e benessere degli animali in produzione zootecnica, Aracne Editrice, Roma.
- D.Caccioni, L. Colombo. 2012. Il manuale del biologico. Edagricole, Bologna.

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#### INTERACTION WITH STUDENTS

At the beginning of the course, objectives, program and methods of evaluation will be described; furthermore, it will be collected the list and data of students attending the course. During the lessons, teaching materials will be provided through the local E-learning platform in shared folders. Students can contact the teacher anytime by e-mail and WhatsApp either for clarifications or to set an appointment in his office at SAFE, IV floor, Viale dell'Ateneo Lucano 10, Potenza.

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#### EXAMINATION SESSIONS (FORECAST)

Whenever requested, a date will be agreed with the students.

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SEMINARS BY EXTERNAL EXPERTS    YES X    NO

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#### FURTHER INFORMATION

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