

Course program

Location: All lectures and practicals will be given at the Faculty of Veterinary Science of the Szent István University which is situated at István u. 2. The lecture room can be found in the "H" building, III floor, hall 301.

Day 1 (April 24): General, demographical and organizational aspects

9.00 – 9.30 Introduction to the course

9.30 – 10.15 Lecture 1

Lecturer(s): P. van Horne and H.W. Windhorst

Title: Poultry production and trade in times of globalization and Avian Influenza

Keywords:

- Changing patterns of poultry production and trade
- Impacts of AI outbreaks on production and trade

10.15 – 10.45 Discussion and coffee break

10.45 – 11.30 Lecture 2

Lecturer(s): H.W. Saatkamp

Title: Conceptualization of decision problems on highly contagious livestock diseases

Keywords:

- Overview of main aspects to be considered in decision making
- Prevention, monitoring and control
- Stakeholders involved, various decision criteria
- Differences/conflicts in interests between stakeholders, countries
- Implications of density and organization, epidemiology and economics

11.30 – 12.00 Discussion and coffee break

12.00 – 12.45 Lecture 3

Lecturer(s): B. Grabkowsky

Title: Demographical and organisational aspects of poultry production which affect the introduction of Avian Influenza

Keywords:

- GIS based steps to evaluate the risk of virus introduction at different administrative levels
- Farm level analysis to identify potential paths for virus introduction
- GIS-Toolbox providing basic data for decision makers in Europe

12.45 – 13.00 Discussion

13.00 – 14.00 Lunch

14.00 – 15.00 Lecture 4

Lecturer(s): V. Guberti

Title: The role of wildlife in introduction of epizootic livestock diseases, particularly Avian Influenza

Keywords:

- General aspects/overview: wild boar/CSF and migratory birds/AI
- CSF in wild boar: prospects and limitation for control
- AI in migratory birds: current state of the arts and prospects and limitation for control
- Implications for Risk Assessment

15.00 – 15.30 Discussion and coffee break

15.30 – 17.30 Practical 1: Data visualization and spatial analysis with GIS

Lecturer(s): B. Grabkowsky

Location: the computer lab can be found in the "N" building, III floor, "Hefop 1".

- Introduction in GIS
- Development of a GIS database: essential required data
- Steps to get started with ArcGIS
 - Data visualisation: Spatial distribution of main risk factors in Europe
 - Spatial analysis with Arc Toolbox
 - How to produce maps

Day 2 (April 25): Epidemiological aspects

9.00 – 9.45 Lecture 5

Lecturer(s): N. Ferrè and S. Marangon

Title: Database development and GIS related data collection

Keywords:

- Epidemiological databases. The essential data in case of an AI epidemics: the Italian experience
- How to organize the spatial data: the geodatabase

9.45 – 10.15 Discussion and coffee break

10.15 – 11.00 Lecture 6

Lecturer(s): A. Bouma

Title: Epidemiological models for decision support (1)

Keywords:

- Overview of types of models (simple>>complex)

- Pros/cons of including spatial and stochastic aspects in modeling
- Advantages and limitations of epidemiological models in decision making
- Data requirements for epidemiological models

11.00 – 11.30 Discussion and coffee break

11.30 – 12.15 Lecture 7

Lecturer(s): A. Bouma, J.A. Stegeman

Title: Epidemiological models for decision support (2)

Keywords:

- Examples and use of epidemiological models (surprising results)

12.15 – 12.45 Discussion

12.45 – 13.45 Lunch

13.45 – 14.30 Lecture 8

Lecturer(s): L. Busani, N. Ferrè and S. Marangon

Title: Use of databases in crisis situations (outbreak control)

Keywords:

- outbreak investigation
- intervention for outbreak control
- use of data for risk management and risk communication in emergency situations

14.30 – 15.00 Discussion and coffee break

15.00 – 17.00 Practical 2

Lecturer(s): A. Bouma and M. Dalla-Pozza

Title: Veterinary decision making in crisis situations

Keywords:

- Interactive discussion lecture, on the basis of well-defined practical cases of AI outbreaks

Day 3 (April 26): Decision making aspects

9.00 – 9.45 Lecture 9

Lecturer(s): H.W. Saatkamp

Title: Financial-economic considerations on epizootic livestock diseases

Keywords:

- Economic view on costs due to diseases
- Categorization of different costs
- Impact of various economic/demographical/epidemiological/stakeholder aspects on economic costs
- Examples: FMD, CSF and AI

9.45 – 10.15 Discussion and coffee break

10.15 – 11.00 Lecture 10

Lecturer(s): H.W. Saatkamp and M.C.M. Mourits

Title: Multiple Criteria Analysis, an extension of economic decision making

Keywords:

- Principles of MCA
- Examples: FMD and AI

11.00 – 11.30 Discussion and coffee break

11.30 – 12.00 Introduction to the case study – H.W. Saatkamp

12.00 – 13.00 Lunch

13.00 – 15.30 Case study on decision making in prevention and control of epizootic livestock diseases

Lecturers: H.W. Saatkamp, A. Bouma and M. Dalla-Pozza

Keywords:

- Groups of 4-5 with 1-2 lecturers
- Preparation beforehand based on wishes participants
- Various topics: design of decision support infrastructure (databases, people involved, organization), critical analysis of decision making in home country (and proposals for improvement)

15.30 – 16.00 Coffee break

16.00 – 16.45 Lecture 11

Lecturer: Jørgen Westergaard

Title: Contingency planning for highly contagious livestock diseases

Keyword:

- Main aspects to be included in contingency plans
- Involvement of stakeholders
- Testing of contingency plans

16.45 – 17.15 Discussion

Day 4 (April 27): Communication aspects and case report

9.00 – 9.45 Lecture 12

Lecturer: B. Bruggink

Title: Communication before, during and after epizootics of livestock diseases

Keywords:

- Different types of groups/communication

- Groups involved (scientists, decision makers, stakeholders)
- Organization of communication
- Communication to the media, specific groups
- Tips and tricks, does and don'ts

9.45 – 10.15 Discussion

10.15 – 11.00 Case report (1)

11.00 – 11.15 Coffee break

11.15 – 12.30 Case report (2)

12.30 – 13.00 Course wrap-up and closure

13.00 – 14.00 Lunch and departure