

REQUIREMENTS
2018/2019 academic year I. semester

Name and code of the subject: Planning of animal Farms MTMAL7015A

Name and title of the person responsible for the subject: Dr. Zoltan Hagymassy associate professor

Additional instructors involved in teaching the subject:

Name and level of the program: Animal Husbandry Engineering MSc

Subject type: compulsory

Teaching timetable of the subject, type of examination: 2+0 colloquium

Credit value of the subject: 3

Purpose of teaching the subject:

Students learn about the planning of the animal farms and it's equipment, and the machines structural elements, and able to managing the operation of the machines. Based on the studies Students necessary to plan the workflow.

Content of the subject (14 weeks):

1. Agricultural buildings
2. Stable systems
3. Mowers
4. Balers I.
5. Balers II.
6. Silage making machines
7. Forage Harvester
8. Fodder mixing plant
9. Cattle farming machines (feeding, watering).
10. Milking machines I.
11. Milking machines II.
12. Pig farming equipment
13. Poultry farming equipment.
14. Horse farming equipment.

Type of mid-term examination:

Participation in practical classes is a condition for obtaining a signature. Completing exercises.

Method of assessment (semester examination mark - report, practical grade, colloquium, examination): practical grade

Teaching aids: Power point slides of university lectures issued to students

Recommended literature:

Brian Bell: Farm Machinery ISBN 1903366682

John Carrol: Tractors and Farm Machinery ISBN-13: 978-0754826583

REQUIREMENTS

2018/19 academic year 1 semester

Name and code of the subject: Fish Breeding MTMAL7016A

Name and title of the person responsible for the subject: Laszlo Stündl PhD

Additional instructors involved in teaching the subject:

Name and level of the program: Animal husbandry MSc

Subject type: compulsory

Teaching timetable of the subject, type of examination: 2+0 P

Credit value of the subject: 3

Purpose of teaching the subject: Course objective : to provide information on the theory of fish genetics and breeding including the broodstock management, induced and natural reproduction, fry and larvae management. The knowledge acquired will enable to participate / cooperate in practical breeding programmes.

Content of the subject (14 weeks):

1. Introduction to fish breeding
2. Fish biology (Diversity, physiology, anatomy – reproduction organs)
3. Fish reproduction: natural spawning
4. Induced spawning
5. Larval development & rearing
6. Genetics
7. Breeding programmes (Mass, selective, etc.)
8. Breeding techniques
9. Biotechnology in fish breeding
10. Breeding in practice (preparation & propagation)
11. Breeding in practice (hatching & larvae management)
12. Breeding of carps
13. Breeding of percids
14. Breeding of catfishes

Type of mid-term examination: Taking part on the 70% of the practices are compulsory.

Method of assessment (semester examination mark - report, practical grade, colloquium, examination): practical grade

Teaching aids: Lecture slides & handouts (texts)

Recommended literature:

1. FAO (2016): The State of World Fisheries and Aquaculture 2016. Contributing to food security and nutrition for all. Rome. 200 pp.
2. Boyd, C.E., Lim, C., Queiroz, J., Salie, K., de Wet L., McNevin, A. (2012): Best Management Practices for Responsible Aquaculture. Aquaculture Collaborative Research Support Program [ACRSP]
3. Gomelsky. B. (2011): Fish Genetics: Theory and Practice March 2011 Publisher: VDM Verlag Dr. Müller ISBN: 9783639328059,
4. Ponzoni, R.W., B.O. Acosta and A.G. Ponniah. (eds). 2006. Development of aquatic animal genetic improvement and dissemination programs: current status and action plans, WorldFish Center Conference Proceedings 73, 120p

REQUIREMENTS

2018/2019. academic year I. semester

Name and code of the subject: Fodder plant production, MTMAL7006A

Name and title of the person responsible for the subject: Dr. Erika Tünde Kutasy, assistant professor

Additional instructors involved in teaching the subject:

Name and level of the program: Animal Husbandry Engineering, MSc

Subject type: compulsory

Teaching timetable of the subject, type of examination: 2+0 P

Credit value of the subject: 3

Purpose of teaching the subject:

Fodder Plant Production subject deals with the agroecological, biological-genetic and agrotechnical factors of crop production. General and special elements in fodder crops production. Ecological, biological and agrotechnical circumstances of crop management. Production of feeds in crop production. General knowledges of fodder crops. Alfalfa and other fodder crops management. General knowledges of cereals. Maize production. Other cereals production.

Content of the subject (14 weeks):

15. Main targets, tasks of crop production. The role of crop production factors
16. Climate and weather conditions in Hungary. Their effect on the crop production.
17. Main soil types and their characteristics.
18. Biological basis of crop production (genotype, seeds). GM plants.
19. Crop rotation, forecrop's value.
20. Nutrient supply of plants.
21. Soil cultivation and sowing technology.
22. Integrated Plant protection.
23. Irrigation methods. Harvesting time and methods.
24. Groups of feeds or feedstuffs
25. General overview of cereal production. Wheat cultivation.
26. Production of spring cereals. Oat cultivation.
27. Maize and maize for silage production.
28. Fodder crops in Fabaceae family. Alfalfa cultivation.

Type of mid-term examination:

- Completing assignments
- Giving a short presentation

Method of assessment (semester examination mark - report, practical grade, colloquium, examination): practical grade

Teaching aids: lecture material

Recommended literature:

Martin, John H., Leonard, Warren H., Stamp. David L., Waldren, Richard: Principles of Field Crop Production. 2005. ISBN: 0130259675

Pratley, Jim: Principles of Field Crop Production. 2006. ISBN: 0195515552

Acquaah, G. 2001: Principles of crop production. Theory, Techniques and Technology. Pearson Prentice Hall. ISBN 0-13-114556-8

Jolánkai M.: Crop Production. Akaprint. Budapest. 2002.

Birkás M.: Environmentally – sound adaptable tillage. Akadémiai Kiadó, Budapest. 2008.

Nagy J.: Maize production. Akadémiai Kiadó, Budapest. 2008.

REQUIREMENTS

2018/2019. academic year II. semester

Name and code of the subject: Élelmiszerminőség és élelmiszerlánc-biztonság (Food quality and food chain safety), MTMAL7011A

Name and title of the person responsible for the subject: Dr. Nikolett Czipa, associate professor

Additional instructors involved in teaching the subject: Loránd Alexa, PhD student, Andrea Kántor, PhD student

Name and level of the program: Animal Husbandry Engineering MSc

Subject type: compulsory

Teaching timetable of the subject, type of examination: 2+2, examination

Credit value of the subject: 4

Purpose of teaching the subject: The main aim of the lectures is to know the physical, chemical and biological/microbiological hazards which have important effects on food safety and food quality. In this semester, students will know the methodology of risk analysis (mainly the risk assessment) and the methodology of the determination of tolerable intakes and other toxicological values. Student will know the methodology of hazard analysis relation to animal origin food production.

Content of the subject (14 weeks):

1. European food safety policy, ÉLBS, Regulation No. 178/2002/EC
2. Influencing factors of food safety
3. Introduction to toxicology, determination of safe human dose, human exposure assessment
4. Microbiological hazards, foodborne diseases, vulnerable groups
5. Chemical hazards
6. Risk management framework (RMF)
7. Hazards of genetically modified plants and foods
8. Labelling of food, geographical indicators and trade marks
9. Introduction to HACCP, HACCP handbook
10. Hazard analysis of animal origin foods (milk and dairy products)
11. Hazard analysis of animal origin foods (meat products)
12. Authorization of food business, penalties
13. Food trade in the EU, border control of food from third countries
14. Case studies

Type of mid-term examination: Attendance in the case of practical courses is compulsory. The acceptable extent of absences is 3 practical courses / semester. The Students have two tests in the session. At least 60% is required to satisfactory mark. If the Student fails to fulfil this we provide an occasion to repeat it in the educational period. Should the student fail this occasion as well, a new occasion must be offered until the end of the third week of the exam period to repeat the mid-term exam.

Criterion of signature: Active attendance on the practical courses.

Method of assessment (semester examination mark - report, practical grade, colloquium, examination): examination

Teaching aids: Slides of lectures

Recommended literature:

IPCS (2010): WHO human health risk assessment toolkit: chemical hazards. ISBN: 978-92-4-154807-6

2016/C 278/01 EU Commission notice on the implementation of food safety management systems covering prerequisite programs (PRPs) and procedures based on the HACCP principles, including the facilitation/flexibility of the implementation in certain food businesses

Codex Alimentarius Commission: Food hygiene. Basic texts.
(<http://www.fao.org/docrep/012/a1552e/a1552e00.pdf>)

Regulations, directives, standards

REQUIREMENTS

2018/2019 academic year 1 semester

Name and code of the subject: Élelmiszer marketing (Food Marketing) MTMEL7005

Name and title of the person responsible for the subject: Dr. Zsolt Polereczki

Additional instructors involved in teaching the subject: Dr. Zsolt Polereczki

Name and level of the program: Food safety and quality engineer sciences (Master)

Subject type: compulsory

Teaching timetable of the subject, type of examination: 2+0 K

Credit value of the subject: 3

Purpose of teaching the subject: The goal of the subject is to make the student understand the basic contexts of the food marketing especially the segmentation, the targeting and positioning. The subject emphasizes the role of the marketing mix in the food markets therefore we study the product, the price, the place and promotion tools detailed. The community marketing tools and strategies are also part of the subject.

Content of the subject (14 weeks):

Lecture topics:

29. Coordination of the requirements
30. Evolution of food marketing system – part 1.
31. Evolution of food marketing system – part 2.
32. Segmentation and new product development (from concept to shop), STP, product, price, place and promotion – part 1.
33. Segmentation and new product development (from concept to shop), STP, product, price, place and promotion – part 2.
34. Food consumption trends – part 1.
35. Food consumption trends – part 2.
36. Regional food systems – part 1.
37. Regional food systems – part 2.
38. Retailers strategies in fresh produce (case study: Short supply chains) – part 1.
39. Retailers strategies in fresh produce (case study: Short supply chains) – part 2.
40. Overview of a specific products' market (free from products) – part 1.
41. Overview of a specific products' market (free from products) – part 1.
42. Final presentation / semester summary

Practice topics

1. Coordination of the requirements
2. Evolution of marketing systems – Coca-Cola, the prime example of marketing – Case study analysis
3. Evolution of marketing systems – Coca-Cola, the prime example of marketing – Case study presentation
4. Segmentation and new product development – Red Bull, the brand getting wings – Case study analysis
5. Segmentation and new product development – Red Bull, the brand getting wings – Case study presentation
6. Food consumption trends – The characteristic of digital food consumer – Case study analysis

7. Food consumption trends – The characteristic of digital food consumer – Case study presentation
8. Regional food systems –Gedeon Totth – International practice of community agricultural marketing – Case study analysis
9. Regional food systems –Gedeon Totth – International practice of community agricultural marketing – Case study presentation
10. Retailer's strategies in fresh produce – Tesco, the world-class customer contact builder – Case study analysis
11. Retailer's strategies in fresh produce – Tesco, the world-class customer contact builder – Case study presentation
12. Overview of specific products' market –The story of delicious gluten free bread: the branding of Glulu – Case study analysis
13. Overview of specific products' market –The story of delicious gluten free bread: the branding of Glulu – Case study presentation
14. The student present the final presentation.

Type of mid-term examination: -

Method of assessment (semester examination mark - report, practical grade, colloquium, examination):

Students must process a case study in the field of food marketing by the end of the semester by an oral presentation. Students must complete a written exam at the end of the semester.

The presentation and the written exam will be evaluated together.

Students can earn 100 points during the semester. The presentation is 50% (50 points), with 50% (50 points) for written exam. Students must also meet the minimum level for presentation and written exam, so they need to reach 51% of the points. During the semester students can earn extra points through active participation in the lessons.

Presentation (50% of the final 100 points): During the oral presentation, students should be given 10 minutes of lectures and they will be present it in one of the last lessons.

Written exam (50% of the final 100 points): The written exam consists of five sections (multiple choices (10 points), true or false (10 points) and three short essays (3*10 points). Students will write the exam during the exam period or pre-exam with the appropriate progress of the semester.

Teaching aids: Collection of case studies

Recommended literature:

5. Rachel E. Helwig (2015): Transparent Food Marketing: A Clear Understanding of Food Marketing Terminology. CreateSpace Independent Publishing Platform; First edition. pp. 1-112 ISBN: 9781514869864
6. Stephen F. Hall (2015): Sell Your Specialty Food: Market, Distribute, and Profit from Your Kitchen Creation. Stephen F. Hall; 6th edition. pp. 1-210. ISBN: 9780692572078
7. Gordon W. Fuller (2011): New Food Product Development: From Concept to Marketplace, Third Edition. CRC Press; 3 edition. pp. 1-508. ISBN: 9781439818640

REQUIREMENTS

2018/19 academic year 1 semester

Name and code of the subject: Aquaculture MTMAL7024A

Name and title of the person responsible for the subject: Laszlo Stündl PhD

Additional instructors involved in teaching the subject:

Name and level of the program: Animal husbandry MSc

Subject type: compulsory

Teaching timetable of the subject, type of examination: 2+1 P

Credit value of the subject: 3

Purpose of teaching the subject: Course objective to provide theoretic information on semi-intensive, intensive and integrated aquaculture systems and technologies including key species, fish biology, technologies, feeding, and economics.

Content of the subject (14 weeks):

43. Current status and tendencies in aquaculture
44. Aquatic resources
45. Fish species of aquaculture
46. Water management in aquaculture
47. Hydrobiology and plankton management
48. Fish biology propagation and larvae management
49. Pond management
50. Feeding and nutrition
51. Cage aquaculture
52. Recirculating aquaculture
53. Integrated multitrophic aquaculture
54. Multifunctional aquaculture
55. Aquaculture economics
56. Business planning in aquaculture

Type of mid-term examination: Taking part on the 70% of the practices are compulsory.

Method of assessment (semester examination mark - report, practical grade, colloquium, examination): practical grade

Teaching aids: Lecture slides & handouts (texts)

Recommended literature:

8. FAO (2016): The State of World Fisheries and Aquaculture 2016. Contributing to food security and nutrition for all. Rome. 200 pp.
9. Boyd, C.E., Lim, C., Queiroz, J., Salie, K., de Wet L., McNevin, A. (2012): Best Management Practices for Responsible Aquaculture. Aquaculture Collaborative Research Support Program [ACRSP]
10. Burke, D., Goetze, B., Clair D., Egna H. (1996): Pond Dynamics/Aquaculture. Collaborative Research Support Program. Office of International Research and Development Oregon State University, USA
11. Allan, G., Heasman H., Ferrar P. (2006): Aquaculture Nutrition: Report on the Aquaculture Nutrition Master Class held at Asian Institute of Technology, Bangkok Thailand 7-19 August 2006 ISBN 0 7347 1771 7