





Balanced farming - Sustainability & Environment

No. of
lessons

SUBJECT	CONTENT / LESSON PLAN
Balanced farming- concept	<ul style="list-style-type: none"> • Farming before and now • Denmark, -from peasant to industry. Challenges and solutions • Physical conditions, climate, soil, water • Farming systems improving nutrient balance • Fertilizing plans and optimizing application of nutrients (org./min.) • Calculating nutrient balance on farm (Livstock and crop)
Sustainability	<ul style="list-style-type: none"> • Elements and priorities • Sustainable farming - what does it mean/farming consequences • Sustainable pig farming • Sustainable cattle farming. (Dairy / Beef) • Sustainable Crop farming
Environment	<ul style="list-style-type: none"> • Environmental impact from agriculture • Aquatic environment, Nitrate, organic substances etc. • Air, - Ammonium, odeur, gases • On farm environmental aspects to be considered/calculated • Means to reduce/avoid environmental pollution from farms • Technical solutions and management approach • Code of Good Agricultural Practice (GAP) • Biodiversity and natural heritage in agriculture • EPI- Environmental Performance Index
Energy	<ul style="list-style-type: none"> • Overall Energy potentials in agriculture • Wind & Sun • Biomass - wood, straw, energy crops and various bi-products • Biogas • Energy and net zero solutions
Socio- economy	<ul style="list-style-type: none"> • Ag-education and organizational initiatives • New ways of capacity-building in rural communities • Value chains, processing, branding and marketing • Rural development and making agriculture attractive • Living standards and meaningful life- Global Happiness Index • Family life conditions - Life style • Can agriculture be leading life style trend-setter?
Sustainability & the 17 UN SDG 's	<ul style="list-style-type: none"> • Sustainable future farming • Sustainable future food production • Agriculture as part of solution to climate changes. • Resources and ressource management. UN Overshoot day • Smart farming and data collection • Sustainability management tools • Shaping the future - shaping the farmer

Subjects are usually integrated with livestock programs and summarize to one week in total

 Cattle - technical lecturing		No. of lessons
SUBJECT	CONTENT/LESSON PLAN	
Biology / Ethology	<ul style="list-style-type: none"> • General biology / ethology • Natural behaviour vs. industrial production • Animal welfare 	6-8
Bio Security	<ul style="list-style-type: none"> • Basic hygiene, bio security, health and disease control • Housing / facilities • Vaccine programs 	6-8
Barn and Environment	<ul style="list-style-type: none"> • Barn facilities • How to make the best cow-environment • Heifer specifics 	4-6
Reproduction and Genetics	<ul style="list-style-type: none"> • Genetics in Denmark • Reproduction strategy • How to find/decide the best bulls • Utilities • Technology 	12-14
Transition Phase Management	<ul style="list-style-type: none"> • From heifer to cow • Dry-off period • Startup after calving 	4-6
The Growing Calf	<ul style="list-style-type: none"> • Handling of the newborn calf • Growing up - heifer • Growing up - bull • Feeding. • Beef cattle 	8-12
Milking Parlor Management	<ul style="list-style-type: none"> • Routines • Quality • Mastitis 	4-6
Feed Management	<ul style="list-style-type: none"> • Feed strategy for all groups. • Composition of feed • Feed storage • Good feeding procedures 	8-10
Hoof Care	<ul style="list-style-type: none"> • Strategy • Health • Hoof trimming course 	4-10
In-house Technology	<ul style="list-style-type: none"> • Milking • Feeding • IT 	8-10
Daily Management	<ul style="list-style-type: none"> • Standard Operational Procedures • Work planning • Key Performance Indicators (KPI) as a management tool 	6-8


 Horses - technical lecturing		No. of lessons
SUBJECT	CONTENT/LESSON PLAN	
Horses historical	<ul style="list-style-type: none"> • From wild to domestic animal • Evolution • Use of horses 	4-6
Housing and Handling	<ul style="list-style-type: none"> • General housing recommendations • General approach (can include practical training) • Safety issues during daily handling (can include practical training) 	2-4
Biology / Ethology / Welfare	<ul style="list-style-type: none"> • Instincts / senses • Typical vs. atypical behaviour • Animal welfare • Basic motivation of the horse • Horses as herd animals / ancestors and relatives / communication • Body care 	10-12
Anatomy	<ul style="list-style-type: none"> • Skeleton, muscles, tendons and nerves • Joints and hoofs • Tissue and organs • Circulation, blood and airways 	10-12
Reproduction	<ul style="list-style-type: none"> • The mare • The stallion • Mating / insemination • Embryo transplantations • Gestation • Foaling • Handling of the newborn / young foal 	10-16
Breeding	<ul style="list-style-type: none"> • Basic genetics • Different breeds and breeding goals • Qualitative vs. quantitative characteristics • Breeding measures and pedigree 	8-10
Usage	<ul style="list-style-type: none"> • Foal • Horsemanship • Mustering • Training vs. age • Fitness • Driving, dressage, racing, jumping etc. 	6-8
Health and Diseases	<ul style="list-style-type: none"> • General health / diseases • When is the horse okay - when is it sick • Age- and exterior assessment • Parasites, prevention and treatment 	10-12
Feeding	<ul style="list-style-type: none"> • Digestive system • Nutritional value and hygienic quality • Commodities and supplements • Basic physiological needs and planning • Body condition • Feed-related diseases • Usage related feeding 	14-16




Horticulture - technical lecturing

No. of
lessons

SUBJECT	CONTENT/LESSON PLAN	No. of lessons
Growth Systems	<ul style="list-style-type: none">• General biology• Extensive vs. intensive plant production• Introduction to Danish production	2-4
Pruning and Trimming	<ul style="list-style-type: none">• Introduction to pruning• Growing-biology in fruit production• Principles of framing and shaping trees	4-8
Pollination and Budding	<ul style="list-style-type: none">• Biology of flowerbud building• Pollination and fruit setting	2-4
Leaf- and Fruit Quality	<ul style="list-style-type: none">• "Leaf outlet" vs fruit development and production• Leaf quality• Fruit development	2-6
Harvest	<ul style="list-style-type: none">• Harvest and picking time• Picking and quality• Storage	2-6
Soil Theory	<ul style="list-style-type: none">• Soil conditions for planting• Watering of trees through irrigation	2-4
Fertilizing	<ul style="list-style-type: none">• Start fertilization• Leaf fertilization• Water fertilization	4-12
Disease Prevention	<ul style="list-style-type: none">• Integrated Pest Management (IPM)• Common diseases in fruit production• Biological control• Pestcontrol	4-12

 Management and Leadership - "soft skills"		No. of lessons
SUBJECT	CONTENT/LESSON PLAN	
Leadership	<ul style="list-style-type: none"> • Various leadership categories and -theories • Creation of strategies • Relations - preconditions, creation and benefits • General staff management • Self-management 	10-16
Motivation	<ul style="list-style-type: none"> • Factors, internal and external • Various motivation theories (Maslow, Herzberg etc.) • Reward and punishment • Needs and expectations 	8-12
Implementation	<ul style="list-style-type: none"> • From fragile idea to solid implementable fact • "Selling" ideas inside your own organization • Enemies of implementation • S-M-A-R-T goals 	8-12
Communication	<ul style="list-style-type: none"> • Dissemination • Approach • Common platform • Communicative skills/practicing • Body language 	10-16
Teams and Groups	<ul style="list-style-type: none"> • Preconditions for team synergy • Boss vs. Team Leader • Setting up team goals according vs. general goals • Using diversity as a strength 	6-12
Situational Leadership	<ul style="list-style-type: none"> • Development of the employee • Commitment • Competences • Motivation 	10-14
LEAN	<ul style="list-style-type: none"> • Implementation of LEAN as management tool • Board meetings • Action plans • Locating and reducing different waste-types 	6-12
Profiling / Personalities	<ul style="list-style-type: none"> • Strengths and weaknesses - knowing your own and other's • DISC / DISC light and other tools • Use of profiling in teams/groups • Matching of personalities and job profiles 	6-12
Meeting technique	<ul style="list-style-type: none"> • Planning • Ensuring meetings are not a waste of time • Creating a secure/comfortable meeting atmosphere • Be the one "in charge" of a meeting • Agendas 	4-6

 Pigs - technical lecturing		No. of lessons
SUBJECT	CONTENT/LESSON PLAN	
Biology / Ethology	<ul style="list-style-type: none"> • General biology / ethology • Natural behaviour vs. industrial production • Animal welfare 	6-8
Bio Security	<ul style="list-style-type: none"> • Basic hygiene, bio security, health and disease control • Housing / facilities • African Swine Fever (ASF) • Introduction to the Danish SPF system (Specific Pathogene Free) • Vaccine programs 	8-12
Gilt Development unit (GDU)	<ul style="list-style-type: none"> • Introduction to the Danish Breeding System • Homebreeding vs. buying in of replacement • How to produce a strong, long lasting gilt • Heat control and synchronization • Feeding, standards and recommendations 	8-12
Mating unit	<ul style="list-style-type: none"> • How to get the sow heating properly / heat check • Mating-/artificial insemination (AI) routines • Home collection of semen / handling of semen • Boar handling • Feeding, standards and recommendations 	8-10
Gestation unit	<ul style="list-style-type: none"> • Returner- and pregnancy check • Body condition score • Housing / fixed stalls vs. loose group housing • Feeding, standards and recommendations 	4-6
Farrowing unit	<ul style="list-style-type: none"> • Pre-farrowing preparations • Farrowing, sow and piglets • Nursing of the newborn piglets, day 0-6 • Nursing of the piglets, day 7-weaning • Nursing- and foster sows • Routines / sow and piglets • Feeding, standards and recommendations 	8-12
Growers	<ul style="list-style-type: none"> • Handling of weaners and finishers • Housing / impact on production and daily management • End products / "consumer" requests • Feeding, standards and recommendations 	6-10
Feed Composition	<ul style="list-style-type: none"> • Raw materials / commodities • Homemixed vs. compound feed • Dry vs. liquid feeding 	4-8
Recording / Benchmarking	<ul style="list-style-type: none"> • Why is recording necessary? • What do the numbers and reports tell us? • Key Performance Indicators (KPI) as a management tool • Solutions high- as well as low tech 	8-12
Daily management	<ul style="list-style-type: none"> • Standard Operational Procedures • Work planning • Batch production 	8-12