City University of Hong Kong
Course Syllabus

offered by Department of Infectious Diseases and Public Health
with effect from Semester B 2020/21

Part I   Course Overview

Course Title:	Livestock Husbandry
Course Code:	VM 2003
Course Duration:	1 semester
Credit Units:	3 credits
Level:	B2
Proposed Area: *(for GE courses only)*	☐Arts and Humanities ☐Study of Societies, Social and Business Organisations ☐Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	Nil
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract
(A 150-word description about the course)

This course is intended to provide veterinary students with a foundation in livestock production systems where livestock (cattle (beef and dairy), small ruminants, pigs and poultry) are grazed on rangelands or pastures or where they are managed in high densities. The course will introduce uses of production livestock, outline basics of livestock industries, animal identification, production targets and data recording.

Students will learn about animal husbandry and management of livestock including housing, management of climate, provision of water and feed (incuding agronomy in pastoral systems and feed provision in intensive systems), waste management and biosecurity. Students will be taught about the link between livestock husbandry and management and production and health issues, how to identify poor husbandry or management practices and how to make positive husbandry/management changes on-farm. The course will also cover production cycles, general reproductive management and routine interventions.

Students will visit local farms and facilities where they will learn how to assess husbandry systems for pigs, poultry and cattle. During these visits students will also assess the respective production systems, in particular routine management practices and farm outputs (productivity). Where appropriate, students will handle pigs, poultry and cattle, providing opportunity to both observe and practice good stockmanship.

2. Course Intended Learning Outcomes (CILOs)
(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs#	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	Describe uses of production livestock (cattle, small ruminants, pigs and poultry) and outline the respective livestock industries including production cycles, production targets and routine management interventions		✓		
2.	Describe normal husbandry and management for production livestock kept on rangeland, pastoral grazing or in high densities		✓		
3.	Assess husbandry and management practices to identify both optimal and poor husbandry or management, and where appropriate, suggest alternatives that could be implemented on-farm to improve welfare, production and health outcomes		✓	✓	
4.	Discuss the importance of biosecurity and describe appropriate biosecurity protocols in livestock farming systems		✓		
5.	Assess farm facilities and demonstrate use of appropriate facilties and equipment to handle and restrain livestock safely and humanely		✓	✓	✓
	* If weighting is assigned to CILOs, they should add up to 100%.	100%			

 # Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: *Ability*
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: *Accomplishments*
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Teaching and Learning Activities (TLAs)
(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.					Hours/week (if applicable)
		1	2	3	4	5	
Lectures	Introduction to topics and provision of learning framework	✓	✓	✓	✓	✓	26 hours in total
Tutorials	Deepening of contents of lectures	✓	✓	✓	✓		7 hours in total
Field trips	Handling of animals under close supervision in appropriate facilities			✓	✓	✓	6 hours in total: 2hrs/session x 3 sessions

* When necessary, the class will be devided in sub-groups for the field trips.

4. Assessment Tasks/Activities (ATs)
(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.					Weighting *	Remarks
	1	2	3	4	5		
Field trips					✓	20%	
Mid-term exam (duration: 1 hour)	✓	✓	✓	✓		30%	
Final examination (duration: 2 hours)	✓	✓	✓	✓		50%	
						100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C)	Failure (F)
1. Field trips	Assess existing facilities and management practices on-farm and competently handles livestock	Will exhibit high competence in describing and rating farm management and in humanely handling animals while minimising risk to the animal and to the operators	Will exhibit good competence in describing and rating farm management and in humanely handling animals while minimising risk to the animal and to the operators	Will exhibit basic competence in describing and rating farm management and in humanely handling animals while minimising risk to the animal and to the operators	Will exhibit lack of competence in describing and rating farm management and in humanely handling animals while minimising risk to the animal and to the operators
2. Examinations	Describes uses of production livestock and outlines livestock industries. Discuss routine animal husbandry and management practices.	Will exhibit high competence in understanding, explaining, and integrating the knowledge in written format	Will exhibit good competence in understanding, explaining, and integrating the knowledge in written format	Will exhibit basic competence in understanding, explaining, and integrating the knowledge in written format	Will exhibit lack of competence in understanding, explaining, and integrating the knowledge in written format

Part III Other Information (more details can be provided separately in the teaching plan)

1. **Keyword Syllabus**
   (An indication of the key topics of the course.)

   Cattle, horses, pigs, poultry, sheep, goats, nutrition, pasture, rangeland, management, climate, husbandry, animal production, breeding, herd, flock, growth rates, food conversion efficiency, economics, waste, health, animal identification, data records, livestock industry, trade, agronomy.

2. **Reading List**
2.1 **Compulsory Readings**
   (Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	None

2.2 **Additional Readings**
   (Additional references for students to learn to expand their knowledge about the subject.) Alphabetic order.

1.	Banerjee, G. (2015). *A textbook of animal husbandry (8th edition)*. Oxford & IBH Publishing.
2.	Cheeke, Peter R. Contemporary Issues in Animal Agriculture (3rd Edition). Pearson Prentice Hall.C.
3.	Cottle, D. and Kahn, L. (2014). Beef Cattle: Production and Trade. CSIRO Publishing, Collingwood
4.	Duncanson, G. (2013). *Veterinary treatment of pigs* (Chapters 1: Husbandry, and 2: Nutrition). CABI, Wallingford, UK.
5.	Gillespie, J. and Flanders, F. (2016). Modern Livestock and Poultry Production, 9th edition. Cengage Learning, Boston.
6.	Plachter, H. and Hampicke, U. (2010). Large-scale Livestock Grazing. Springer-Verlag, Berlin
7.	Sejian, V., Naqvi, S., Ezeji, T., Lakritz, J and Lal, R. (2012). Environmental Stress and Amelioration in Livestock Production. Springer-Verlag, Berlin
8.	Squier, S. (2011). *Poultry science, chicken culture*. Rutgers University Press, New Jersey.