

## BAGB313 Fish and Animal Nutrition

ECTS Value: 5 ECTS

### Overall Objectives and Outcomes

This module is fundamental in the learners progress towards understanding better the management of an animal/fish farm. Providing the required diet is an important component in ensuring that the farm animals grow healthily and produce the ynts that are required and the feeding regime that must be followed to keep such animal in these conditions. This module gives the students the needed competences to better understand how nutrition can be managed on the farm. This will be done through industry visits, lab sessions and lectures during which the concepts of animal and fish nutrition will be thoroughly discussed. This can only be done when the producer has a good grasp of the nutrie. Such a module is crucial for the student to be in a better position to assimilate better the principles in other related units such as animal biology and husbandry.

By the end of this module, the learner will be able to:

### Competences

- a. appraise chemical, nutritional and financial characteristics of different feedstuffs;
- b. devise feeding regimes for a range of animal species at different life stages;
- c. devise feeding regimes for a range of fish species at different life stages.

### Knowledge

- a. distinguish between structures and roles of various macro- and micro-nutrients;
- b. discuss deficiency symptoms of a range of nutrients;
- c. compare and contrast digestive systems of various animals and fish species;
- d. outline major characteristics and nutritive roles of various feedstuffs and additives;
- e. describe factors that affect quantity and ratio of nutrients in a feeding regime;
- f. explain origin and effect of feed toxins.

### Skills

- a. justify choice and quantity of feedstuff through the taking into consideration of factors that affect the amount and ratio for various nutrients;
- b. compare and contrast feeding regimes for animals (including fish) at different life stages;
- c. justify choice of feedstuff by relating with structure of an animal's digestive system;
- d. describe how to store feeds properly;
- e. decide on whether an animal is suffering from nutritional deficiencies;
- f. decide upon best feed to give to a range of animals/fish at various life stages;

- g. decide upon the best feeding frequency to use for a range of animals/fish at various life stages;
- h. work in a team to execute a feeding regime for a given animal;
- i. present rationale behind a feeding regime;
- j. discuss different nutrient requirements of different animals/fish;
- k. suggest improvements in a given feeding regime;
- l. weigh advantages and disadvantages of present feed sources;
- m. use specialized software to come up with a basic feed formula

### Mode of Delivery

This module adopts a blended approach to teaching and learning. Information related to the structure and delivery of the module may be accessed through the IfE Portal. For further details, kindly refer to the Teaching, Learning and Assessment Policy and Procedures found on the Institute for Education's website.

### Assessment Methods

This module will be assessed through: Presentation and Lab Reports

### Suggested Readings

#### Core Reading List

1. Eisemann, J. & Kim, S.W. (2014). Animal Nutrition. Kendall Hunt Publishing, US
2. Athithan, S. (2012). Fish Nutrition and Feed Technology: A Teaching Manual. Daya Publishing House, India

#### Supplementary Reading List

1. Wiseman, J. & Cole, D.J. (2013). Feedstuff Evaluation. Butterworth-Heinemann, UK
2. Armsby, H.P. and Fries, A.J. (2013). U.S. Bureau of Animal Industry