



STATE UNIVERSITY OF MARINGÁ
AGRICULTURAL SCIENCES CENTER
GRADUATE PROGRAM IN ANIMAL SCIENCE

COURSE	Special Topic: Carbohydrates in Ruminant Nutrition					
CODE						
LEVEL	Masterand PhD					
COURSE LOAD	30 hours					
CREDITS	Theory:	2	Practice:	0	Total:	2

HEADING

A study on the carbohydrates in ruminant nutrition.

PROGRAM

1. Characterization and analysis of carbohydrates for ruminants. 2. Fiber in ruminant nutrition. 3. Processing of fiber feeds for ruminants. 4. Methods for determining the physical structure of feeds for ruminants. 5. Non-fiber carbohydrates in ruminant nutrition. 6. Processing of cereal grains for ruminants. 7. Methods for evaluating starch digestibility in ruminants. 8. Balancing starch and fiber in ruminant diets.

REFERENCES

Books:

- NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE. 2016. Nutrient Requirements of Beef Cattle, Eighth Revised Edition. Washington, DC: The National Academies Press. <https://doi.org/10.17226/19014>.
- NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE. 2021. Nutrient Requirements of Dairy Cattle: Eighth Revised Edition. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25806>
- VAN SOEST, P. Nutritional Ecology of the Ruminant. 2. ed. Ithaca: Cornell University Press, 1994.

Journals:

- Animal Feed Science and Technology
- Journal of Animal Science
- Journal of Dairy Science
- Livestock Science
- Professional Animal Scientist
- Revista Brasileira de Zootecnia

COURSE EXAMINATION

1. One theoretical exam.