I. Catalog Description (Credit Hours of Course):
   This course will cover nonruminant feeds, how they are processed, the nutritive value of feedstuffs and their correct fed schedules and calculations. Three 1-hour lectures (3)

II. Co- or Prerequisite(s):
   AY 304 (Principles of Animal Nutrition)

III. Purposes or Objectives of the Course (optional):
   1) Define between energy needs of various groups.
   2) Describe differences in feedstuff classifications.
   3) Explain factors related to processing of feed products.

IV. Student Learning Outcomes (Minimum of 3):
   1) Students will be able to explain the source & benefits of high energy feedstuffs.
   2) Students will be able to differentiate different feeds for different nonruminant species.
   3) Students will be able to expand on calculating balanced rations.

V. Optional departmental/college requirements:
   A. Faculty must have experience in ration formulation

VI. Course Content or Outline (Indicate number of class hours per unit or section):

   A. **Topic**

   **Unit One: Digestive Structure & Groups**
   - Horses: 2 hours
   - Swine: 2 hours
   - Dogs & Cats: 2 hours
   - Exam 1: 3 Weeks

   **Unit Two: Feedstuff Classifications**
   - High Energy Feedstuffs: 6 hours
   - Protein Supplements: 4 hours
   - Exam 2: 3 Weeks
### Unit Three: Feedstuffs Con’t.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Roughages</td>
<td>3 hours</td>
</tr>
<tr>
<td>Vitamin</td>
<td>3 hours</td>
</tr>
<tr>
<td>Minerals</td>
<td>3 hours</td>
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<tr>
<td>Additives</td>
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Exam 3

### Unit Four: Nutritive Value

<table>
<thead>
<tr>
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<tr>
<td>Estimating nutritive value of feedstuffs</td>
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<td>Variation in nutritive value of feedstuffs</td>
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Exam 4

### Unit Five: Calculations and Processing

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<th>Topic</th>
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<tr>
<td>Processing feedstuffs for nonruminants</td>
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<tr>
<td>Computer calculations</td>
<td>7 hours</td>
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Exam 5

### Final Project

Signature: ____________________________________________  Date: ____________________

Chair

Signature: ____________________________________________  Date: ____________________

Dean