### ANSC 420

**Mare Reproductive Physiology and Management Scoring S-2007**

**Assignment:** How to determine foaling readiness of mare...Related to physiology

<table>
<thead>
<tr>
<th>Level of Achievement</th>
<th>+4 Sophisticated</th>
<th>+3 Competent</th>
<th>+2 Not Yet Competent</th>
<th>Unsatisfactory or Failure +1 or 0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accurate and complete explanation of key concepts and theories with proper elaboration. (Needs to be said, correct, with elaboration)</td>
<td>Explanations of concepts and theories are accurate and complete. (Needs to be said and correct)</td>
<td>Explanations of concepts and/or theories are incomplete. (Needs to be said but incomplete)</td>
<td>(What is said is inaccurate or nothing is said)</td>
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#### 1. Udder Changes
- **Enlargement** – 2-4 wks
- **Visible milk vein** – 24-48 hrs
- **Teat filling** – within 24 hrs
- **Waxing** – 24-48 hrs, up to 72 hrs

- Knowing the changes but lacks elaboration i.e. time frame
- Not listing the four changes

#### 2. Vulvar Changes
- **Gradual elongation and thickening for several weeks with more dramatic changes within the last week**
- **Scanty discharge** – < 1 wk
- **Check for caslick** – 2 wks prior
- **Relaxation of pelvic ligaments starts at two weeks out, dramatic with foaling imminent**

- **Elongation**
- **Swelling**
- Can only list one of the two

#### 3. Electrolyte dynamics
- **Drop in Na** – 3-5 days prior
- **Rise in K** – 3-5 days prior
- **Na/K inversion**
  - <200 ppm Ca = 98% no foal in 24 hrs
  - >200 ppm Ca = 97% foal within 72 hrs
  - 300-500 ppm Ca – foaling imminent
- **Ca test best performed in the p.m.**

- Understanding Ca changes and values but lacks other sophisticated benchmarks
- Knowing Ca changes

#### 4. Physical production of milk
- **Minimal mammary sample**
- **Gradual increase in sample volume and consistency** – 1wk
- **Onset of colostrum production** – night of foaling

- Lacks time understanding
- Failure to relate secretions to colostrum
- Lacks either volume or consistency