## **Animal Science**

## Assignment

You are a dairy housing expert. You are bidding on a job to build a calf housing facility for a 100 cow registered holstein herd located in southern Wisconsin. This client is new to the dairy business, but has very high expectations that his prize animals will be healthy. Cost is no issue, but the client is very conscious of an image developed as being an environmentally minded business operator, and prefers to look practical to his/her neighbors and colleagues. (that would mean no gold trim, but a computerized calf feeding system would be cool)

The expected number of calves per year is 150, with a 75% heifer rate due to use of sexed semen on all first calf heifers. You need to take into account cold weather and hot weather. You need to take into account the client will be using hired help, and does not want a lot of turn-over of employees.

Your bid will include:

- a drawing with details of your facility on a 12 X 18 sheet of paper
- how ventilation will be addressed
- isolation or group housing
- employee amenities
- space needs, size of the facility
- what environmental issues are addressed with this facility
  this includes waste issues, how it is heated or cooled, materials used for construction,
  lighting for the facility, alternative sources of energy
- how the facility will work to use, to move cattle, to handle feed stuffs

This assignment will be due March 25 and is worth 50 pts.

Elements of bid	Wow 10 pts	well done, 7 pts	Could use more work opts
drawing	color, in scale, neat,	color or in scale, has some discrepancies	There is a drawing, pencil not much detail
Explanation of calf zone	Well explained, much detail	some explanation room for some questions	I will have many questions to ask, details lacking
Explanation of ventilation system	Comparison of options, includes hot and cold weather	good explanation of the system used,	lacks explanation of how it will work, leaves many questions
Worker Amenities	Employee comfort, working conditions explain and thought through, ideas how their job will be easier to perform	Employee conditions are explained, but detail left out. No or little explanation of how the job is made better	I have to figure out how most employee amenities fit in by the drawings
Environmental considerations	Explain features for animal waste, waste water, energy savings or creation options, building materials	Explanations of some features, like lighting and waste, at least 3 environmental ideas	fewer than 3 ideas discussed