

# Course VCSN630

## Neonatology and Intensive Care Medicine

Course Organizer: Dr. Jon Palmer

### **I. Course Objectives**

The objective of this course is to introduce you to Neonatology and Critical Care Medicine both theoretically and practically. This will be achieved by a series of lectures, seminars and foal sitting experiences. The lecture series will introduce you to important concepts and give you a knowledge base which will help you get the most out of your foal sitting experience. Although the foal sitting experience is largely a nursing experience, there will be opportunity to observe a variety of diagnostic techniques and see a variety of cases. These experiences will help broaden your understanding of the lecture material. Finally, you will "put it all together" by completing a series of clinical problems in the form of a take-home exercise.

The foal sitting experience is very different from the one you can receive by rotating as a fourth year student through the NICU. As a fourth year student, there is opportunity to learn by observing the progression of the cases over days instead of hours and by becoming fully involved in the diagnostic procedures and case management decisions. There are also in depth rounds covering both the problems individual neonates demonstrate and expanding on many of the principles taught in this course. If you enjoy this course and are interested in Intensive Care Medicine or Equine Medicine, I suggest that you seriously consider taking the fourth year Neonatology elective.

### **II. Course Format**

#### **A. Lectures**

The lectures in this course will provide you with both a theoretical introduction to Neonatology and Critical Care Medicine and a practical knowledge base of common problems seen in Neonatology. Formal lectures will be followed by the foal sitting experience and clinical problems to help assist you in making the transition from listening about diseases and general principles to diagnosing and managing individual cases. This transition is one of the most difficult that you are asked to make as a student. I hope that this course will give you a good head start in this process which will be completed as you enter the clinics at the end of next year.

## B. Foal Sitting

1. Each student will be required to complete 30 hours (5 shifts- 6 hrs) of foal sitting duty in the NICU during spring break or the fourth quarter. The shift times are as follows:

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Monday – Friday:	5:30 p.m. to 11:00 p.m.
Saturday:	6:00 a.m. to 12 noon 12 noon to 6:00 p.m. 6:00 p.m. to 12 mid
Sunday	6:00 a.m. to 12 noon 12 noon to 6:00 p.m. 6:00 p.m. to 11:00 p.m.
Spring Break Days and After 4 <sup>th</sup> Quarter Exams:	6:00 a.m. to 12 noon 12 noon to 6:00 p.m. 6:00 p.m. to 12 mid 12 mid to 6:00 a.m.

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2. Students should sign-in with the NICU nurse on duty at the beginning of each shift. The nurse organizes the available help to meet the nursing care needs of the patients. Students must be in the NICU during their assigned shifts even if there are no neonates in the unit. Students are encouraged to use these times to review the use of NICU equipment and to work on their clinical problems. Simple skills such as taking blood pressures (on yourself or classmates if no cases are available), running PCV, TP, and dextrose (on any available blood) usually can be performed even when there are no cases available.

3. Duties will include all aspects of nursing care for the critically ill neonates: monitoring vital signs, patient hygiene, physical therapy, monitoring fluids and oxygen therapy, milking mares, monitoring pregnant mares for impending parturition, updating foal records, etc. Although not every student will be able to share all experiences, a log of experiences will be kept by the student on a specially designed form. A required number of specific experiences will be necessary for successful completion of the foal sitting section of the course. This log is designed to insure that you receive the maximum value from the experience. Duties may extend beyond this experience log list to any of the necessary tasks required for successful nursing care, including such mundane tasks as cleaning and setting up equipment or sorting and washing laundry.

4. Students are expected to follow all biosecurity procedures and regulations while foal sitting.

5. Students must complete all assigned foal sitting duty shifts. Each missed shift (unexcused absence) will result in deduction of 10 points from the final grade. To

qualify as an excused absence an explanation, in writing, for the absence must be sent to the course coordinator. The criteria for an excused absence as outline in the Academic Procedures and Policies for examinations will be used.

Students may trade shifts with classmates, but it is the originally scheduled student's obligation to insure that the master schedule in the NICU (maintained by the volunteer coordinator) reflects any changes. If no one shows up for a shift, the person listed on the master schedule will be held responsible. Failure to complete the number of required foal sitting hours due to illness or other unavoidable emergencies will result in a grade of incomplete and reschedule of those shifts missed will be required.

### **C. Take-home Clinical Problems.**

The take-home clinical problems will consist of a series of clinical cases with detailed descriptions of the history and physical examination findings. Students will be required to answer questions about differential diagnosis, diagnostic tests, and case management. These clinical problems are designed as a learning experience as well as an evaluation. Students having difficulty with the format should seek assistance from Dr. Palmer. Although students may have group discussions about course material, the clinical problems should be an individual exercise and a reflection of the individual's work. The clinical problems will be distributed during the third quarter and the deadline for returning them will be during the fourth quarter. The deadline will be announced when the exercise is distributed. Completing some foal sitting shifts will be helpful in answering some questions. Some outside reading may be required to complete the problems.

### **III. Grading**

- A. The course grade will be determined by the student's successful completion the foal sitting assignments (30 points) and performance on the take-home clinical problems (70 points).
- B. The deadline for turning in the take-home problems will be firm. Except under the most unusual circumstances, 1 point will be deducted for each day passed the deadline that the completed problems reach Dr. Palmer.
- C. Failure to complete and record the required number of foal sitting experiences will result in deduction of points from the final grade.
- D. Depending on my clinical load, grades may not be posted for the course until mid summer. The end of quarter 4, when the clinical exercises are turned in corresponds to a very busy time in NICU.

### **IV. NICU Web Site: <http://nicuvet.com>**