UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

FALL 2016

COURSE NUMBER NGR 6323 – Section 13FG

COURSE TITLE Neonatal Nurse Practitioner 3

CREDITS 4

PLACEMENT DNP Program: Neonatal Nurse Practitioner Track

PREREQUISITES NGR 6321 Neonatal Nurse Practitioner 2

NGR 6321L Neonatal Nurse Practitioner Clinical 2

CO-REQUISITES NGR 6323L Neonatal Nurse Practitioner Clinical 3

FACULTY

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| --- | --- | --- | --- |
| Jacqui Hoffman, DNP, NNP-BC  [hoffmanjm@ufl.edu](mailto:hoffmanjm@ufl.edu) | HPNP 2225 | Cell (727) 709 9211 | Office hours: Virtual on Adobe Connect by arranged meeting, Mon. 1:00–2:00 PM; additional hours by appt |
| Leslie A. Parker, PhD, NNP-BC [parkela@ufl.edu](mailto:parkela@ufl.edu) | HPNP 2227 | (352) 273-6384  Beeper#:  (352) 413-3212  Cell (352) 215 9360 | Thurs., 10:00 – 12:00; additional hours by appt |

COURSE DESCRIPTION This course provides the student with in-depth knowledge of advanced nursing practice management of critically ill and chronically ill neonates/infants. Emphasis is on the utilization of relevant theories, critical thinking, and evidence-based knowledge to formulate differential diagnoses, diagnoses, treatment plans, and optimal outcome parameters for physiologically unstable or chronically ill neonates/infants who have complex and critical health problems, are technologically dependent, and are at high risk for developing complications. The focus of this course is complex cardiovascular, developmental, sensory, drug exposure, hematologic, immune dysfunction and commonly occurring health care problems in critically ill and chronically ill neonates/infants.

## COURSE OBJECTIVES Upon completion of this course, the student will be able to:

1. Apply knowledge from neonatal and fetal physiology and pathophysiology to formulate management plans for neonates/infants with selected complex critical and/or chronic health care problems.
2. Develop appropriate differential diagnoses and diagnoses based on analysis and interpretation of hypothetical data, including history, symptoms, physical findings, and diagnostic information for critically ill and chronically ill neonates/infants.

COURSE OBJECTIVES (continued)

1. Formulate treatment plans based on current scientific rationale, evidence-based practice guidelines and standards of care for neonates/infants with selected critical and/or chronic health care problems.
2. Propose parameters to evaluate the effectiveness of treatment plans in achieving optimal outcomes for neonates/infants with selected complex critical and/or chronic health care problems.
3. Discuss collaborative processes of the interdisciplinary health care team in achieving optimal health outcomes for critically ill and/or chronic neonates/infants.
4. Critique research related to complex acute and critical health care problems.
5. Analyze diversity issues related to complex acute and critical health care problems.
6. Discuss patient and family issues related to end of life care.
7. Evaluate support programs within the hospital and community to assist the patient and family during and following hospitalization.

COURSE SCHEDULE

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| --- | --- | --- | --- |
|  | Day | Time |  |
| Class | On-line | Classes will be on Mondays from 9 AM – 1 PM on Adobe Connect **unless otherwise announced**. On Neo III exam dates, class will be Monday from 11:30 AM – 1 PM.  Neo III Exams 9-11AM  Mandatory onsite class - **November 10th (Thursday)** | |

E-Learning in Canvas is the course management system that you will use for this course. E-Learning in Canvas is accessed by using your Gatorlink account name and password at <http://elearning.ufl.edu/>. There are several tutorials and student help links on the E-Learning login site. If you have technical questions call the UF Computer Help Desk at 352-392-HELP or send email to [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

It is important that you regularly check your Gatorlink account email for College and University wide information and the course E-Learning site for announcements and notifications.

Course websites are generally made available on the Friday before the first day of classes.

TOPICAL OUTLINE

1. The effect of chronic health problems on the infant, family and community
2. Pathophysiology, assessment, and management of retinopathy of prematurity, short gut syndrome, bronchopulmonary dysplasia, and osteopenia of prematurity
3. Pathophysiology, assessment and management of hemopoietic and clotting disorders, immunologic disorders, musculoskeletal, skin and cardiovascular defects in the neonate
4. Developmental care for the critically ill and/or chronically ill neonate during and following hospitalization
5. Perinatal substance abuse and the effect on the fetus and neonate
6. Pathophysiology, assessment and management of neonates/infants requiring ECMO.
7. Discharge planning of the chronically ill neonate including: preparing the family for home monitoring, oxygen therapy, parental nutrition and ventilatory support.

TOPICAL OUTLINE (Continued)

1. Legal, ethical and economic issues which impact the provision of care for the infant with long-term health problems
2. The evolution of the advanced neonatal nursing specialization into the community

TEACHING METHODS

Lectures, case studies, selected readings and audiovisuals

LEARNING ACTIVITIES

Online and class participation, case studies, and written assignments

EVALUATION METHODS/COURSE GRADE CALCULATION

4 Case studies 30% total (7.5% each)

Case Study 1: 9/12/2016

Case Study 2: 10/3/2016

Case Study 3: 11/10/2016 - **During mandatory onsite – Student case presentation**

Case Study 4: 12/5/2016

Criteria for case studies will be in course materials at the beginning of term.

Examinations 60% total – 20% each

Neo III Exam 1: 9/26/2016 from 9-11AM

Neo III Exam 2: 10/31/2016 from 9-11 AM

Neo III Exam 3: 12/12/2016 from 9-11 AM

Must achieve an average of 74% or higher on the three exams to pass the course.

Class participation 10%

All students are required to place at least 3 entries per week on the Canvas discussion board (minimum 40). This may include submitting new items for discussion or to discuss an issue already introduced.

Total 100%

Assignments will be graded by faculty within a 2 week time period

The College of Nursing utilizes ***ProctorU,*** a live proctoring service, for major examinations in graduate web-based online courses to ensure a secure testing environment.  See Canvas site for more information on Proctor U and how to create an account.

* Each student computer must be in compliance with Policy S1.04, *Student Computer Policy* and must contain a web cam, microphone, and speakers.
* CON IT Support office will oversee this process and provide technical assistance.

MAKE UP POLICY

Make-up exams will only be arranged in the event of extreme emergencies and the course faculty must be notified in advance. Students who have extraordinary circumstances preventing submitting any assignment by the due date should explain these circumstances to the course instructor **prior** to the scheduled assignment due date. Failure to discuss prior to the due date will result in the missed assignment not being accepted once the assignment has been reviewed in class. If the case study assignment has not been reviewed in class, a letter grade will be lost for each additional day the assignment is late, if the student did give prior notification to the course faculty. Attendance at seminars is required; if unable to attend due to illness or emergency, the course faculty must be notified in advance, and the student will be required to listen to the recorded session and submit a summary of each presentation highlighting areas that increased their understanding of the problem/disease process.

GRADING SCALE/QUALITY POINTS

A 95-100 (4.0) C 74-79\* (2.0)

A- 93-94 (3.67) C- 72-73 (1.67)

B+ 91- 92 (3.33) D+ 70-71 (1.33)

B 84-90 (3.0) D 64-69 (1.0)

B- 82-83 (2.67) D- 62-63 (0.67)

C+ 80-81 (2.33) E 61 or below (0.0)

\* 74 is the minimal passing grade

For more information on grades and grading policies, please refer to University’s grading policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

PROFESSIONAL BEHAVIOR

The College of Nursing expects all Nursing students to be professional in their interactions with patients, colleagues, faculty, and staff and to exhibit caring and compassionate attitudes. These and other qualities will be evaluated during patient contacts and in other relevant settings by both faculty and peers. Behavior of a Nursing student reflects on the student's individual’s ability to become a competent professional Nurse. Attitudes or behaviors inconsistent with compassionate care; refusal by, or inability of, the student to participate constructively in learning or patient care; derogatory attitudes or inappropriate behaviors directed at patients, peers, faculty or staff; misuse of written or electronic patient records (e.g., accession of patient information without valid reason); substance abuse; failure to disclose pertinent information on a criminal background check; or other unprofessional conduct can be grounds for disciplinary measures including dismissal.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>. Students are required to provide their own privacy screen for all examination’s administered to student laptops. No wireless keyboards or wireless mouse/tracking device will be permitted during examinations.

University and College of Nursing Policies:

Please see the College of Nursing website for a full explanation of each of the following policies - <http://nursing.ufl.edu/students/student-policies-and-handbooks/course-policies/>.

Attendance

UF Grading Policy

Accommodations due to Disability

Religious Holidays

Counseling and Mental Health Services

Student Handbook

Faculty Evaluations

Student Use of Social Media

REQUIRED TEXTBOOKS

Blackburn, S. (2013). Maternal, fetal, and neonatal physiology: A clinical perspective. (4th ed.). Elsevier. ISBN: 9781437716238.

Cloherty, J., Eichenwald, E., Hansen, A. & Stark, A. (2012). *Manual of Neonatal Care*, (7th ed.). Lippincott, Williams & Wilkins. ISBN-13: 978-1-60831-777-6. (suggested to purchase with workbook at CCPR: <http://ccprwebsite.org/cp_product.cfm?i=102>)

Gomella, T. L., Cunningham, M.D., & Eyal, F.G. (2013). *Neonatology management, procedures, on-call problems, diseases and drugs: 25th Anniversary* (7th ed.). McGraw-Hill Professional Publishing. ISBN: 9780071768016.

Moore, K. & Persaud, T. (2011). *The Developing Human: Clinically oriented embryology* (9th ed.). Elsevier. ISBN - 9781437720020.

Young, T. E., & Mangum, B. (Most recent edition – available online). *Neofax.*

Moore, K. & Persaud, T. V. N. (2008). *The developing human: Clinically oriented embryology* (8th ed.). Philadelphia: Saunders Elsevier. ISBN-13: 9781416037064.

**WEEKLY CLASS SCHEDULE**

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| **Date** | **Topic** | **Readings** |
| Weeks 1-3  August 22nd  August 29th  **Wednesday, Sept 7th**, **1:00-5:00 PM** | Genetics  HUMAN EMBRYOLOGY: Human Birth Defects | **Required readings:**  Blackburn – Chapter 1, Chapter 3 pages 98-102, and Chapter 6  Cloherty – Chapter 10  Gomella – Chapters 88 and 105 (pg 741)  Moore & Persaud – Chapter 20  Allen, T. (2012). CHARGE syndrome: Diagnosis and clinical management in the NICU. *Advances in Neonatal Care,* 12: 336-342.  Glaspy, E. & Foge, J. (2015). Prader-Willi Syndrome: A case study and parent perspective. *Advances in Neonatal Care,* 15(4): 290-98.  Hartway, S. (2009). A parent’s guide to the genetics of Down syndrome. *Advances in Neonatal Care,* 9(1): 27-30.  Smpokou, P., Lanpher, B., & Rosenbaum, K. (2015). Important considerations in the initial clinical evaluation of the dysmorphic neonate. *Advances in Neonatal Care,*  **Supplemental readings:**  Reyna, B. & Pickler, R. (1999). Patterns of genetic inheritance. *Neonatal Network,* 18(1): 7-10.  Rios, A., Furdon, S., Adams, D., & Clark, D. (2004). Recognizing the clinical features of Trisomy 13 syndrome. *Advances in Neonatal Care,* 4: 332-343.  Shaw, J. (2008). Trisomy 18: A case study. *Neonatal Network,* 27: 33-41.  Trotter, C. & Carey, B. (2003). VATER Association. *Neonatal Network,* 22: 71-75.  Welch, J. & Williams J. (1999). Fragile X Syndrome. *Neonatal Network,* 18(6): 15-22. |
|  | **TERATOGENS**: Environment Hazards, Congenital Infections | **Required readings:**  Blackburn, Chapter 7 (pg. 203-11)  Cloherty, Chapter 10  Gomella, Chapters 50, 88 (pg. 605), 89 (pg. 612), 114 (pg. 777), 141, and 142  Moore & Persaud, Chapter 20    Cassina, M., Salviati, L., Gianantonion, D., & Clementi, M. (2012). Genetic susceptibility to teratogens: State of the art. *Reproductive Toxicology.* 34(2): 186-91.  Diav-Citrin, O. (2011). Prenatal exposures associated with neurodevelopmental delay and disabilities. *Developmental Disabilities Research Reviews.* 17: 71-84.  Lazzarotto, T., Guerra, B., Gabrielli, L., Lanari, M., & Landini, M. (2011). Update on the prevention, diagnosis, and management of cytomegalovirus infection during pregnancy. *Clinical Microbiology and Infection,* 17(9): 1285-93.  Rasmussen, S. (2012). Human teratogens update 2011: Can we ensure safety during pregnancy? *Birth Defects Research (Part A).* 93(3): 123-8.  Yamamoto, R., Ishii, K., Shimada, M., Hayashi, S., Hidaka, N., et al. (2013). Significance of maternal screening for toxoplasmosis, rubella, cytomegalovirus and herpes simplex virus infection in cases of fetal growth restriction. *Journal of Obstetrics and Gynaecological Research,* 39: 653-7.  **Supplemental Readings**  Blue, G., Kirk, E., Sholler, G., Harvey, R., & Winlaw, D. (2012). Congenital heart disease: Current knowledge about causes and inheritance. *Medical Journal of Australia*. 197(3): 155-9.  DeVries, J. (2007). The ABCs of CMV. *Advances in Neonatal Care*. 7(5): 248-55.  Moretti, M., Caprara, D., Drehuta, I., Yeungs, E. et al. (2012). The fetal safety of angiotensin converting enzyme inhibitors and angiotensin II receptor blockers. *Obstetrics and Gynecology International.* Doi: 10.1155/2012/658310. Epub 2011 Dec 13.  Wattendorf, D.J. & Muenke, M. (2005). Fetal alcohol spectrum disorders. [*Am Fam Physician.*](javascript:AL_get(this,%20'jour',%20'Am%20Fam%20Physician.');) 72(2):279-82. |
| Week 4  September 12th  Case Study 1 Due Before Start of Class | PAIN IN THE NEONATE  DEVELOPMENTAL INTERVENTIONS IN NEONATAL CARE: Developmental Care of Preterm Infant, Normal Milestones, Assessment, Environmental and Maturational Hazards, Early Intervention, Chronic Sequelae of Neonatal Disease  HUMAN EMBRYOLOGY: Development of the eye and ear  SUBSTANCE ABUSE AND INFANT DEVELOPMENT:  Immediate and Long-Term Effects, Legal Implications, Intervention Programs | **Required Readings:**  Blackburn, Chpt 15 (pg 551-553)  Cloherty, Chapters 14 and 67  Gomella, Chapter 8 (pg. 51-52), 14, 76, and 93  Moore, Chapter 18    Campbell-Yeo, M., Fernandes, A., & Johnston, C. (2011). Procedural pain management for neonates using nonpharmacological strategies, Part 2: Mother-Driven interventions. *Advances in Neonatal Care,* 11(5): 312-18.  Hall, R. (2012). Anesthesia and analgesia in the NICU. *Clinics in Perinatology,* 39(1): 239-54.  Hardy, W. (2011). Facilitating pain management. 11(4): 279-81.  Hartley, K., Miller, C., & Gephart, S. (2015). Facilitate tucking to reduce pain in neonates: Evidence for best practice. *Advances in Neonatal Care,* 15(3): 201-08.  Ludington-Hoe. (2011). Thirty years of kangaroo care: Science and practice. *Neonatal Network,* 30(5): 357-362.  Zeller, B. & Giebe, J. (2014). Pain in the neonate: Focus on nonpharmacologic intervention. *Neonatal Network,* 33(6): 336-40.  **Supplemental Readings**  AAP. (2007). Prevention and management of pain in the neonate: An update. *Advances in Neonatal Care,* 7(3): 151-160.  Kaneyasu, M. (2012). Pain management, morphine administration, and outcomes in preterm infants: A review of the literature. *Neonatal Networks,* 31(1): 21-30.  Lester, B., Miller, R., Hawes, K., Salisbury, A., et al. (2011). Infant neurobehavioral development. *Seminars in Perinatology,* 35(1): 8-19.  Mountcastle, K. (2010). An ounce of prevention: Decreasing painful interventions in the NICU. *Neonatal Network,* 29(6): 353-58.  **Required readings:**  Cloherty, Chapter 12  Gomella, Chapter 103  Beaulieu, M. (2013). Oral clonidine in the management of acquired opioid dependency. *Neonatal Network,* 32(6): 419-424.  Hudak, M., & Tan, R. (2012). Neonatal drug withdrawal. *Pediatrics,* 129: e540-e560.  Logan, B., Brown, M., & Hayes, M. (2013). Neonatal abstinence syndrome: Treatment and pediatric outcomes. *Clinics in Obstetrics and Gynecology,* 56(1): 186-92.  Newman, K. (2014). The right tool at the right time: Examining the evidence surrounding measurement of neonatal abstinence syndrome. *Advances in Neonatal Care,* 14(3): 181-6.  Schempf, A. (2007). Illicit drug use and neonatal outcomes: A critical review. *Obstetrical & Gynecological Survey,* 62: 749-57.  **Suggested Readings:**  Askin, D. & Diehl-Jones, B. (2001). Cocaine: Effects of in utero exposure of the fetus and neonate. *Journal of Perinatal Neonatal Nursing,* 14: 83-102.  Cambell, S. (2003). Prenatal cocaine exposure and neonatal/infant outcomes. *Neonatal Network,* 22: 19-21.  Greene, C. & Goodman, M. (2003). Neonatal abstinence syndrome: Strategies for care of the drug-exposed infant*. Neonatal Network,* 22(4): 15-25.  Lucas, K. & Knobel, R. (2012). Implementing practice guideline and education to improve care of infants with neonatal abstinence syndrome. *Advances in Neonatal Care,* 12(1): 40-45.  Marcellus, L. (2007). Neonatal abstinence syndrome: Reconstructing the evidence. *Neonatal Network,* 26: 33- 40.  Wallman, C., Smith, P., & Moore, K. (2011). Implementing a perinatal substance abuse screening tool. *Advances in Neonatal Care,* 11(4): 255-67. |
| Week 5  September 19th | PROBLEM OF IMMUNE RESPONSE: The Immune System in the Neonate, Immunologic Evaluation, HIV, Immune Disorders | **Required readings:**  Blackburn, Chapter 13  Cloherty, Chpt 48 (pg. 603-610)  Gomella, Chpt 73 (pg. 495-496), 75 (pg. 510), 97, and 130 (pg. 872-873)  American Academy of Pediatrics, Committee on Pediatric AIDS. HIV testing and prophylaxis to prevent mother-to-child transmission in the United States. (2008). *Pediatrics,* 122: 1127-1134.  Association of Women’s Health, Obstetric & Neonatal Nurses. (2012). HIV screening for pregnancy women and infants. *Journal Obstetrics, Gynecological, & Neonatal Nursing,* 41(1): 154-5.  Chase, N., Verbsky, J., & Routes, J. (2010). Newborn screening for T-cell deficiency. *Current Opinion in Allergy and Clinical Immunology,* 10: 521-525.  Walkovich, K. & Boxer, L. (2011). Congenital neutropenia in a newborn. *Journal of Perinatology,* 31 Suppl 1: S22-3.  Ward, C. & Baptist, A. (2013). Challenges of newborn severe combined immunodeficiency screening among premature infants. *Pediatrics,* 131(4): e1298-302.  **Supplemental Readings:**  Borte, S., Wang, N., Oskarsdottir, S., Dobeln, U. & Hammarstrom, L. (2011). Newborn screening for primary immunodeficiencies: Beyond SCID and XLA. *Annals of the New York Academy of Sciences,* 1246: 118-130.  Boxer, L. (2012). How to approach neutropenia. *Hematology/the Education Program of the American Society of Hematology.* 2012: 174-82.  Carter, B. (2006). Nursing care of the premature infant with severe combined immunodeficiency disease. *Neonatal Network,* 25: 167-174.  Katz, A.N. (2004). Neonatal HIV infection. *Neonatal Network.* 23(1): 15-20.  Schutzbank, W. & Steele, R. (2009). Management of the child born to an HIV-Positive mother. *Clinical Pediatrics,* 48: 467-471. |
| Week 6  September 26th  **Exam1: 9-11 AM**  **Class 11:30 A M - 1:00 PM**    Week 7  October 3rd  Case Study 2 Due Before Start of Class | MANAGEMENT OF GENITOURINARY PROBLEMS  HUMAN EMBRYOLOGY:  Urogenital System | **Required Readings**  Blackburn, Chapter 11  Cloherty, Chapters 28 and 61  Gomella, Chapters 68, 91, 123, 137, & 146  Moore & Persaud - Chapter 12  [Hassett, S., Smith, G., & Holland, A. (2012).](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed?term=Hassett%20S%5BAuthor%5D&cauthor=true&cauthor_uid=22198807)  Prune belly syndrome. [*Pediatric Surgery International,*](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed/22198807) 28(3): 219-28.  [Jetton, J. &](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed?term=Jetton%20JG%5BAuthor%5D&cauthor=true&cauthor_uid=22227783) [Askenazi, D. (2012).](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed?term=Askenazi%20DJ%5BAuthor%5D&cauthor=true&cauthor_uid=22227783)  Update on acute kidney injury in the neonate. *Current Opinion Pediatrics,* 24(2): 191-6.  Knobel, R. & Smith, J. (2014). Laboratory blood tests useful in monitoring renal function in neonates. *Neonatal Network,* 33(1): 35-40.  Lee, P., Houk, C., Ahmed, S., Hughes, I., & the International Consensus Conference on Intersex. (2006). Consensus statement on management of intersex disorders. *Pediatrics,* 118: e488-500.  Quigley, R. (2012). [Developmental changes in renal function.](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed/22426155) *Current Opinion in Pediatrics,* 24(2), 184-90.  Stokowski, L. A. (2004). Hypospadias in the neonate. *Advances in Neonatal Care*, 4(4): 206-215.  [Warne, S., Hiorns, M., Curry, J., & Mushtaq, I. (2011).](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed?term=Warne%20SA%5BAuthor%5D&cauthor=true&cauthor_uid=21262748) Understanding cloacal anomalies. [*Archives of Disease in Child*](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed/21262748)*hood.* 96(11): 1072-6.  Zaritsky, J. & Warady, B. (2011). Peritoneal dialysis in infants and young children. [*Seminars in Nephrology.*](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed/21439434) 31(2): 213-24. |
| Week 8  October 10th | ABO/Rh Isoimmunization  Problems of SGA/LGA  DISCHARGE OF THE NICU PATIENT: Discharge planning process, Technologically dependent infants, Parent education, normal growth and development, Community resources, Home care and follow up. | **Required readings:**  Cloherty – Chpt 26  Gomella - Chpts 58, 100, and 105  [Bhutani](http://pediatrics.aappublications.org/search?author1=Vinod+K.+Bhutani&sortspec=date&submit=Submit), V. and The Committee on Fetus and Newborn From the American Academy of Pediatrics) (2011). Phototherapy to Prevent Severe Neonatal Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. *Pediatrics*. 128(4): e1046-e1052.  Rubarth, L. (2011). Blood types and ABO incompatibility. *Neonatal Network,* 30(1): 50-3.  Srinivas, G., Cuff, C., Ebeling, M., & Mcelliqott, J. (2016). Transcutaneous bilirubinometry is a reliable conservative method of assessing neonatal jaundice. *Journal of Maternal-Fetal & Neonatal Medicine,* 29(16): 2635-9.  Stokowski, L. (2011). Fundamentals of phototherapy for neonatal jaundice. *Advances in Neonatal Care,* 11(5 Suppl): S10-21.  **Required readings:**  Cloherty, Chapters 16 & 18  Gomella, Chapters 19 & 66  Ambalavanan, N., Carlo, W., McDonald, S., Yao, Q. et al (2011). Identification of extremely premature infants at high risk for rehospitalization. *Pediatrics,* 128: e1216-e1225.  Bull, M. & Engle, W. (2009). Safe transportation of preterm and low birth weight infants at hospital discharge. *Pediatrics,* 123: 1424-1429.  Committee on Fetus and Newborn. (2008). Hospital discharge of the high-risk neonate. *Pediatrics,* 122: 1119-1126.  Discenza, D. (2011). Respiratory syncytial virus and the premature infant parent. *Neonatal Network,* 30: 345.  Discenza, D. (2009). NICU parents’ top ten worries at discharge. *Neonatal Network,* 28: 202-203.  Peacock, J. (2014). Discharge summary for medically complex infants transitioning to primary care. *Neonatal Network,* 204-7.  **Suggested Readings:**  Doucette, (2004). The effects of family resources, coping, and strains on family adjustment 18-24 months after the NICU experience. *Advances in Neonatal Care,* 4(2). 92-104.  Forsythe, P., Maher, R., Kirchick, C., & Bieda, A. (2007). SAFE discharge for infants with high-risk home environments. *Advances in Neonatal Care,* 7(2): 69-75.  Jones, M., McMurray, J., & Englestad, D. (2002). Follow-up of the high-risk infant: The “geriatric” NICU patient. *Neonatal Network*, 21: 49-58.  Joseph, R. (2011). Tracheostomy in infants: Parent education for home care. *Neonatal Network,* 30: 231-242.  McMurray, J. & Jones, M. (2004). The high risk infant is going home: What now*? Neonatal Network*, 23: 43-47.  Purdy, I. (2000). Newborn auditory follow-up. *Neonatal Network*, 19: 25-33.  Sneath, N. (2009). Discharge teaching in the NICU: Are parents prepared? An integrative review of parents’ perceptions. *Neonatal Network,* 28: 237-246.  Vasquez, E., Pitts, K., & Mejia, N. (2008). A model program: Neonatal Nurse Practitioners providing community health care for high risk infants. *Neonatal Network,* 27: 163-169. |
| Week 9  October 17th | No Classes FANNP | Work on case studies |
| Week 10  October 24th | ETHICS IN THE NICU: Ethical Dilemmas, Decisions Regarding Discontinuing Life Support. How Early is too Early?  Family in the NICU:  Family Support, Palliative Care | **Required Readings**  Cloherty, Chapter 19  Gomella, Chapter 21  Barnum, B. (2009). Benevolent injustice: A neonatal dilemma. *Advances in Neonatal Care,* 9:132-136.  Froh, E. & Spatz, D. (2014). An ethical case for the provision of human milk in the NICU. *Advances in Neonatal Care,* 14(4): 269-73.  Kuschel, C. & Kent, A. (2011). Improved neonatal survival and outcomes at borderline viability brings increasing ethical dilemmas. *Journal of Paediatrics and Child Health,* 47: 585-589.  Messner, H. & Gentili, L. (2011). Reconciling ethical and legal aspect in neonatal intensive care. *Journal of Maternal-Fetal and Neonatal Medicine,* 24 (Suppl 1): 126-128.  Pasaron, R. (2013). Neonatal bioethical perspectives: Practice considerations. *Neonatal Network,* 32(3): 184-192.  Purdy, I. (2006). Embracing bioethics in neonatal intensive care, part I: Evolving toward neonatal evidence-based ethics. *Neonatal Network,* 25: 33- 33-42.  Purdy, I. & Wadhwani, R. (2006) Embracing bioethics in neonatal intensive care, part II: Case histories in neonatal ethics. *Neonatal Network,* 25: 43- 53.  Romesberg, T. (2007). Building a case for neonatal palliative care. *Neonatal Network,* 26: 111-115.  Stafford, C. (2015). A case study of Trisomy 13: Balancing hope and reality. *Advances in Neonatal Care,* 15(4): 285-89.  **Supplemental Readings**  Kopelman, A. (2006). Understanding, avoiding and resolving end-of-life conflict in the NICU. *The Mount Sinai Journal of Medicine,* 73: 580-6.  Juretschke, L. (2001). Ethical dilemmas and the nurse practitioner in the NICU. *Neonatal Network*, 20: 33-38.  Romesberg, T. (2003). Futile care and the neonate. *Advances in Neonatal Care*. 3: 213-219.  Waltham, P. & Schenk, L. (1999). Neonatal ethical decision-making: Where does the NNP fit in? *Neonatal Network* 18: 27-32.  **Required readings:**  Cloherty – Chapter 20  Gomella – Chapter 52  Armentrout, D. & Cates, L. (2011). Informing parents about actual or impending death of their infant in a newborn intensive care unit. *Journal of Perinatal & Neonatal Nursing,* 25: 261-267.  Discenza, D. (2010). When a baby dies: When families need you the most. *Neonatal Network,* 29: 259-261.  Discenza, D. (2016). The NICU mom who rarely visits and what you can do about it. *Neonatal Network,* 35(3): 167-169.  De Lisle-Porter, M. & Podruchny, A. (2009). The dying neonate: Family-centered end-of-life. *Neonatal Network,* 28: 75-83.  Fortney, C. & Steward, D. (2015). Medical record documentation and symptom management at the end of life in the NICU. *Advanced in Neonatal Care,* 15(1): 48-55.  NANN (2015). Palliative and end-of-life care for newborns and infants. Position statement 3063.  <http://www.nann.org/uploads/>  files/PalliativeCare6\_FINAL.pdf  Orzalesi, M. & Aite, L. (2011). Communication with parents in the neonatal intensive care. *Journal Maternal Fetal Neonatal Medicine,* 24 (Suppl 1): 135-7.  [Smith et al., (2012). Coping with the neonatal intensive care unit experience: parents' strategies and views of staff support.](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed?term=Smith%20VC%5BAuthor%5D&cauthor=true&cauthor_uid=23111723) [*Journal of Perinatal & Neonatal Nursing*](http://www.ncbi.nlm.nih.gov.lp.hscl.ufl.edu/pubmed/23111723)*,* 26, 343-52.    **Supplemental readings:**  Brazy, J.E., Anderson, B.M.H., Becker, P (2001). How parents of premature infants gather information and obtain support. *Neonatal Network,* 20: 41-47.  Dyer, K. (2005). Identifying, understanding and working with grieving parents in the NICU, Part II: Strategies. *Neonatal Network,* 24: 27-40.  Dyer, K. (2005). Identifying, understanding and working with grieving parents in the NICU,  Part I: Identifying and understanding loss and the grief response. *Neonatal Network*, 24: 35-46.  Matthews, A. & O’Connor-Von, S. (2008). Administration of comfort medication at end of life in neonates: effects of weight. *Neonatal Network,* 27: 223-227.  McAllister, M. & Dionne, K. (2006). Partnering with parents: Establishing effective long-term relationships with parents in the NICU, *Neonatal Network,* 25: 329-337.  Thomas, L. (2008). The changing role of parents in neonatal care: A historical review. *Neonatal Network,* 27: 91-100.  Woodwell, W. (2002). Perspectives on parenting in the NICU. *Advances in Neonatal Care,* 2: 161-165. |
| Week 11  October 31st  **Exam 2: 9-11 AM**  **Class 11:30 AM – 1:00 PM** | PROBLEMS OF THE MUSCULOSKELETAL AND INTEGUMENTARY SYSTEM  HUMAN EMBRYOLOGY: Development of the Skeletal, Muscular and Integumentary Systems  Development of Limbs | **Required Readings**  Blackburn, Chapters 14 and 15  Cloherty, Chapters 58 and 63  Gomella, Chapters 75 and 115  Moore, Chapter 14, 15, 16, & 19  Bishop, N. (2010). Characterising and treating osteogenesis imperfect. *Early Human Development,* 86(11): 743-6.  Ivich, J. (2015). Ichthyosis in the neonatal setting. *Advances in Neonatal Care,* 15(4): 253-260.  Oppenheimer, J. & Hallas, D. (2011). Uncharacteristic bullous lesions on a newborn: What’s your diagnosis? *Journal of Pediatric Health Care*, 25(3): 186-90.  Rimoin, L. & Graham, J. (2012). Blistering skin disorders in the neonate. *Clinical Pediatrics,* 51(7): 685-8.  Rimoin, L. & Graham, J. (2012). Ichthyotic skin disorders in the neonate. *Clinical Pediatrics,* 51(8): 796-800.  **Supplemental Readings**  Hackley, L. (2008). Osteogenesis imperfect in the neonate. *Advances in Neonatal Care,* 8(1): 21-30.  Harvey, H. Shaw, M., & Morrell, D. (2010). Perinatal management of harlequin ichthyosis: A case report and literature review. *Journal of Perinatology,* 30(1): 66-72.  Merritt, L. (2009). Recognizing craniosynostosis. *Neonatal Network,* 28(6): 369-76.  Prado, R., Ellis, L., Gamble, R., Funk, T., et al. (2012). Collodion baby: An update with a focus on practical management. *Journal of the American Academy of Dermatology,* 67(6): 1362-74. |
| Week 12  **Onsite Mandatory Class**  **Thursday, Nov 10th**  **8:30 AM – 5:00 PM** | ISSUES IMPACTING NEONATAL CARE: Current and Future Trends for the APN.  **STUDENT CASE STUDY PRESENTATIONS (Case Study 3)**  SIM LAB | **Required readings:**  Bellflower, B. & Carter, M. (2006). Primer on the practice doctorate for neonatal nurse practitioners. *Advances in Neonatal Care,* 6: 323-332.  Bosque, E. (2011). A model of collaboration and efficiency between neonatal nurse practitioner and neonatologist: Application of collaboration theory. *Advances in Neonatal Care,* 11: 108-113.  Cussan, R. & Strange, S. (2008). Neonatal nurse practitioner role transition: The process of retaining expert status. *Journal Perinatal & Neonatal Nursing,* 22: 329-337.  Freed, G., Dunham, K., Lamarand, K., Loveland-Cherry, C., Martyn, K. & American Board of Pediatrics Research Advisory Committee. (2010). Neonatal nurse practitioners: Distribution, role and scope of practice. *Pediatrics,* 126: 856-860.  Hatch, J. (2012). The role of the neonatal nurse practitioner in the community hospital Level I nursery. *Neonatal Network,* 31(3): 141-147.  Honeyfield, M. (2009). Neonatal nurse practitioners: Past present and futures. *Advances in Neonatal Care,* 9: 125-128.  Smith, J., Donze, A., Cole, F., Johnston, J., & Giebe, J. (2009). Neonatal advanced practice nurses as key facilitators in implementing evidence-based practice. *Neonatal Network,* 28: 193-201.  **Supplemental Readings:**  Farah, A.L., Bieda, A., & Shiao, S. (1996). The history of the NNP in the United States. *Neonatal Network,* 15: 11-21  Johnson, K. (2002). The history of the neonatal nurse practitioner: Reflections from “Under the looking glass.” *Neonatal Network,* 21: 51-60. |
| Weeks 13 -15  November 14th  November 21st  November 28th  Case Study 4 Due Before Start of Class | PROBLEMS MUSCULOSKELTAL (Cont)  CHRONIC HEALTH PROBLEMS OF THE NEONATE: BPD, ROP, Rickets, Conjugated Hyperbilirubinemia. | **Required Readings:**  Blackburn, Chapters 10 (pg 345-47), 17 and 18  Cloherty, Chapters 26 (pg.332-334), 34, 59, 64, and 65  Gomella, Chapters 57, 84, 99, 116, and 126  Moore Chapters 9    Ali, Z., Schmidt, P., Dodd, J., & Jeppesen, D. (2013). Bronchopulmonary dysplasia: A review. *Archives of Gynecology and Obstetrics,* 288(2): 325-333.  American Academy of Pediatrics. (2013). Policy statement: Screening examination of premature infants for retinopathy of prematurity. *Pediatrics,* 131(1): 189- 95.  Beaulieu, M. (2012). Bevacizumab (Avastin) for the treatment of retinopathy of prematurity. *Neonatal Network,* 31(4): 242-47.  Francis, K. (2016). What is best practice for providing pain relief during retinopathy of prematurity eye examinations? *Advances in Neonatal Care,* 16(3): 220-228.  Kelly, D. (2010). Preventing parenteral nutrition liver disease. *Early Human Development,* 86(11): 683-7.  Khetan, R., Hurley, M., Spencer, S., & Bhatt, J. (2016). Brochopulmonary dysplasia within and beyond the neonatal unit. *Advances in Neonatal Care,* 16(1): 17-25.  Papoff, P., Cerasaro, C., Caresta, E., et al. (2012). Current strategies for treating infants with severe bronchopulmonary dysplasia. *Journal of Maternal, Fetal, & Neonatal Medicine,* 25 Suppl 3: 15-20.  Quimson, S. (2015). Retinopathy of prematurity: Pathogenesis and current treatment options. *Neonatal Network,* 34(5): 284-287.  Tinnion, R. & Embletine, N. (2012). How to use…alkaline phosphatase in neonatology. *Archives of Disease in Childhood, Education and Practice Issue,* 97(4): 157-63.  **Supplemental Readings**  Askin, D. & Diehl-Jones, W., (2003). The neonatal liver, Part III: Pathology of liver dysfunction. *Neonatal Network*, 22(3): 5-15.  Beachy, J. (2007). Investigating jaundice in the newborn. *Neonatal Network,* 26(5): 327- 333.  Diehl-Jones, W. & Askin, D. (2003). The neonatal liver, Part II: Assessment and diagnosis of liver dysfunction. *Neonatal Network*, 22(2): 7-15.  Gien, J. (2011). Pathogenesis and treatment of BPD. *Current Opinions in Pediatrics,* 23(3): 305-313.  Jobe, A. (2011). The new bronchopulmonary dysplasia. *Current Opinions in Pediatrics,* 23(2): 167-172. |
| Week 16  December 5th | Care of the 0-2 yr old | Links within course |
| Final Exams – **Exam 3**  **December 12th** **9-11AM** |  |  |

Approved: Academic Affairs Committee: 10/11

Faculty: 11/11

UF Curriculum Committee: 04/12