

NRPM 111: Maternal and Child Emergency Care Syllabus

[Semester and year]



Instructor information

Instructor	Email Address	Office hours
Paula Johnson	Paula.johnson@princetonrescue.com	Vary

General information

Description

This course integrates assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for gynecological, obstetrical, neonatal, and pediatric emergencies.

Pre-Requisites: NRPM 103

Expectations and goals

Upon Successful completion of this course, students will be able to:

- Describe the anatomic structures and physiology of the reproductive system during pregnancy.
- Identify the stages of labor and the EMT-Paramedic's role in each stage.
- Formulate an appropriate treatment plan for providing initial care to a newborn.
- Describe the epidemiology, including the incidence, morbidity/mortality, risk factors and prevention strategies, pathophysiology, assessment findings, and management for the following obstetrical, neonatal, pediatric, and geriatric emergencies.
- Explain the general approach, patient assessment differentials, and management priorities for patients with various types of emergencies that may be experienced in prehospital care

Course Delivery Method: Hybrid

Course materials

Required materials

Computer with Internet capabilities to access:

- <https://CourseSites.com>

Optional materials

Required text

- Nancy Caroline's Emergency Care in the Streets; 8th edition, 2013 by Elling and Smith; Publisher Jones and Bartlett. ISBN: 978-1-284-13718-7

Course schedule (*Weeks correspond to semester schedule)

Week	Topic	Pre-Class Assignment	Class Session	Reflective Assignment <i>(DUE: Friday after class session)</i>
1	Gynecology	Video Lecture: Gynecological Emergencies	<ul style="list-style-type: none"> • Patient Condition (<i>portfolio of learning</i>) 	<ul style="list-style-type: none"> • Virtual Patient Encounter Case 9 • Virtual Patient Encounter Case 6 • Are You Ready: Case Study - OB/GYN
2	<ul style="list-style-type: none"> • Obstetrics • Neonatal Care 	<ul style="list-style-type: none"> • Lecture: Obstetrics • Lecture: Neonatology 	<ul style="list-style-type: none"> • Patient Condition • Ausubel Triangle • Disease & Medication (<i>portfolio of learning</i>) • Video Analysis: Pre-hospital Delivery • Video Analysis: Newborn Reflexes 	<ul style="list-style-type: none"> • Virtual Patient Encounter Case 10 • Case Study - Prematurity & Hypothermia • Case Study - Eclampsia
3	<ul style="list-style-type: none"> • Pediatrics 	Lecture: Pediatric Emergencies	Video Cases - PALS <ul style="list-style-type: none"> • Patient Condition • Ausubel Triangle • Disease & Medication (<i>portfolio of learning</i>) 	<ul style="list-style-type: none"> • Case Study: Ped Resp • Video Case 9 Mo.s postictal • Virtual Patient Encounter Case #13 (SIDS) • Video Case #44: Bronchiolitis

Procedures for Evaluation

- A. *Students must complete each NRPM course with a grade point average of at least 70%. Any student who does not have a 70% average at the completion of an NRPM course will not be allowed to continue in the program. The student's academic standing will be discussed with the student periodically throughout the program.
- B. If a student scores below a 70% on a NRPM Cumulative examination, the student will be required to retake the examination until a score of 70% is attained; however, the original score will stand as the recorded score.

***NOTE:** NRPM 202 is the exception to this policy. In this course, you must successfully complete each sub-specialty based on the criteria from each governing agency. The final grade issued for this course will be a "pass/fail." If the student is unable to receive a passing grade for this class, the student will NOT be allowed to continue in the Paramedic Program.

Grading Components and Weights:

The Paramedic Program Student's Classroom Assessment grade will be the sum of the weighted scores comprising the parameters of course work outlined below.

Didactic	
80%	Coursework <ul style="list-style-type: none"> • Homework/Special Projects - 5% • Quizzes - 5% • Case Studies/Objectives/Skill - 20% • Exams/Platinum Documentation - 50%
20%	Monthly Behavioral Evaluations

Grading Scale:

100-90 = A 89-80 = B 79-70 = C 69-60 = D <59 = F

All students must maintain a C average in each course to continue throughout the program

Attendance Policy

All material is important to your success; therefore, students absent more than 5% of the course without a valid excuse will be dismissed from the program of study.

There are two types of absences recognized as a “valid excuse” by Princeton Rescue Squad’s Education Department: (1) absence resulting from participation in an activity where you are officially representing the Education Department; and (2) absence caused by unforeseeable and unavoidable circumstance which is beyond your control. All other absences are considered willful and will not count as excused. It is your responsibility to provide your instructor with a proper explanation and documentation of these valid absences. It is the responsibility of the student to make up any work or testing missed. The missed (comparable) coursework and exams must be completed within 72 hours of the absence and prior to the last date of the class.

Online Video course Lectures associated with “Hybrid” classes are required to be completed by 10am on the morning of the deadline listed. These deadlines are typically due weekly and attendance will be taken based on your submission of these Lectures. If you fail to submit the Lecture when due, you will be marked absent for that week’s hybrid class.

Tardiness will not be tolerated. Any student who shows up later than 15 minutes into the beginning of a course or leaving a class session 30 minutes or more before the end of the class day will result in the mark of tardy on his/her record. An accumulation of 5 tardies will result in an unexcused absence.

Students may withdraw from the course at any time. Any student that misses more than two (2) consecutive class sessions without contacting the course instructor will be considered to have withdrawn from the course.

Student Advisory and Evaluation

Faculty will routinely discuss student progress throughout the program of study at regular intervals (increments no longer than 25% of the program) to provide learners with adequate chances to take corrective actions. During these mandatory meetings with a student item(s) or subject(s) of concern to discuss may include, but are not limited to:

Excessive absences and tardiness, failure to turn in assignments / clinical rotations on time, classroom / clinical behavior concerns, plagiarism, cheating, struggling or failure to maintain a GPA of 70%, etc.

A Student Advisory Form will be filled out and signed by both the Faculty member addressing the concern, and the student. Once the concern has been documented, the Program Instructor and student will discuss possible resolutions to the problem and a proposed action plan will be written on the Advisory Form. The student may use the Advisory Form to record a rebuttal against the initial concern or proposed action plan. The instructor will then mark the form “unresolved” and forward it to the Education Director who investigate the matter and make a determination on a second Advisory Form. Copies of these completed Advisory Forms are available to the student; however, originals must and will be retained by the Education Program.

Standards of Conduct Regarding Cell Phone Use

As adults, you are permitted to retain your cellular devices unless during testing. At that time, all cell phones must be placed in a bag away from your testing area or given to your instructor until the testing is complete. It is common during lecture for students to utilize their cell phones to look up information regarding topics discussed in the class session, and this practice is permitted. However, if the instructor or other member of the instructional or administrative staff see that cell phones are being used for other purposes (ie: facebook, messenger, etc.) during lecture, lab, or any other designated course activity then the following discipline policy will take place:

- First offense - verbal warning
- Second offense - written warning
- Third offense - dismissal from the program

Academic Dishonesty

As a student and pre-hospital professional, you are expected to adhere to a professional code of conduct and not engage in plagiarism, cheating, falsifying information or records, or any other such activity. Failure to adhere to this code of conduct will result in disciplinary action up to and including dismissal from the program.

Grounds For Dismissal

A student may be dismissed from the program for the following reasons:

1. Absenteeism greater than 1 unexcused class.
2. Receiving a “D” or “F” as a cumulative grade for the course.
3. Insubordination (in class, lab, or in clinical)
4. The conviction and/or known use of, distribution of, or possession of illegal drugs, or controlled substances.
5. Failure to accomplish clinical assignments and objectives
6. Unprofessional or unethical conduct
7. Cheating in related or professional EMS courses or in clinical documentation.

NRPM 111 Course Objectives:

1. Review the anatomic structures and physiology of the female reproductive system.
2. Identify the normal events of the menstrual cycle.
3. Describe how to assess a patient with a gynecologic complaint.
4. Explain how to recognize a gynecologic emergency.

5. Describe the general care for any patient with a gynecologic emergency.
6. Describe the pathophysiology, assessment, and management of specific gynecologic emergencies.
7. Identify the normal events of pregnancy.
8. Describe how to assess an obstetric patient.
9. Describe the procedures for handling complications of pregnancy.
10. Identify the stages of labor and the paramedic's role in each stage.
11. Differentiate normal and abnormal delivery.
12. State indications of an imminent delivery.
13. Identify and describe complications associated with pregnancy and delivery.
14. Explain the use of the contents of an obstetrics kit.
15. Differentiate the management of a patient with predelivery emergencies from a normal delivery.
16. State the steps in the predelivery preparation of the mother.
17. Establish the relation between standard precautions and childbirth.
18. State the steps to assist in the delivery of a newborn.
19. Describe the management of the mother after delivery.
20. Discuss the steps in the delivery of the placenta.
21. Describe how to care for the newborn.
22. Describe how and when to cut the umbilical cord.
23. Summarize neonatal resuscitation procedures.
24. Describe the procedures for handling abnormal deliveries and maternal complications of labor.
25. Describe special considerations of a premature baby.
26. Describe special considerations when meconium is present in amniotic fluid or during delivery.

Affective-

1. Value the importance of maintaining a patient's modesty and privacy while still being able to obtain necessary information.
2. Defend the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information.
3. Serve as a role model for other EMS providers when discussing or caring for patients with gynecological emergencies.
4. Advocate the need for treating two patients (mother and baby).
5. Value the importance of maintaining a patient's modesty and privacy during assessment and management.
6. Serve as a role model for other EMS providers when discussing or performing the steps of childbirth.

1. Define the terms *newborn*, *newly born*, and *neonate*.
2. Discuss antepartum and intrapartum factors associated with an increased risk for neonatal resuscitation.
3. Identify the factors that lead to premature birth and low birth weight newborns.
4. Discuss the assessment findings associated with primary and secondary apnea in the neonate.
5. Discuss pulmonary perfusion and asphyxia.
6. Describe the etiology, epidemiology, history, and physical findings for the following congenital anomalies:
 - Tracheoesophageal fistula
 - Diaphragmatic hernia
 - Choanal atresia
 - Pierre Robin sequence
 - Meningomyelocele
 - Cleft lip and palate
 - Omphalocele
7. With the patient history and physical examination findings develop a treatment plan for newborns with the following conditions:
 - Tracheoesophageal fistula
 - Diaphragmatic hernia
 - Choanal atresia
 - Pierre Robin sequence
 - Meningomyelocele
 - Cleft lip and palate
 - Omphalocele

8. Discuss the indications, necessary equipment, technique, and assessment of the newborn's response for the following interventions:
 - Blow-by oxygen delivery
 - Ventilatory assistance
 - Orogastric tube insertion
 - Chest compressions
 - Tracheal intubation
 - Vascular access
 - Needle chest decompression
9. Identify the primary signs used for evaluating a newborn during resuscitation.
10. Discuss the initial steps in and formulate a treatment plan for providing initial care to a newborn, including transport guidelines.
11. Identify the appropriate use of the Apgar score in caring for a newborn.
12. Calculate the Apgar score for various newborn situations.
13. Describe the etiology, epidemiology, history, and physical findings for newborn cardiac arrest.
14. Develop a treatment plan for a newborn in cardiac arrest.
15. Discuss the signs of hypovolemia in a newborn.
16. Discuss the treatment plan to stabilize the neonate after cardiac arrest.
17. Describe the etiology, epidemiology, history, and physical findings for the following conditions:
 - Meconium aspiration
 - Apnea
 - Bradycardia
 - Prematurity
 - Respiratory distress or cyanosis
 - Seizures
 - Fever
 - Hypothermia
 - Hypoglycemia
 - Vomiting
 - Diarrhea
 - Birth injury
18. With the patient history and physical examination findings, develop a treatment plan (including transport destination) for newborns with the following conditions:
 - Meconium aspiration
 - Apnea
 - Bradycardia
 - Prematurity
 - Respiratory distress or cyanosis
 - Seizures
 - Fever
 - Hypothermia
 - Hypoglycemia
 - Vomiting
 - Diarrhea
 - Birth injury
19. Discuss the effects of maternal narcotic use on the newborn and formulate a treatment plan for the newborn with narcotic depression.

Affective-

1. Demonstrate and advocate appropriate interaction with a newborn/ neonate that conveys respect for their position in life.
2. Recognize the emotional impact of newborn/ neonate injuries/ illnesses on parents/ guardians.
3. Recognize and appreciate the physical and emotional difficulties associated with separation of the parent/ guardian and a newborn/ neonate.
4. Listen to the concerns expressed by parents/ guardians.
5. Attend to the need for reassurance, empathy and compassion for the parent/ guardian.

Cognitive-

1. Describe Emergency Medical Services for Children and discuss how an integrated system can affect patient outcome.

2. Identify methods and mechanisms that prevent injuries and discuss the paramedic's role in the reduction of infant and childhood morbidity and mortality from acute illness and injury.
3. Describe techniques for successful assessment and treatment of infants and children.
4. Identify typical age-related vital signs and the appropriate equipment used to obtain pediatric vital signs.
5. Identify common responses of families to acute illness and injury of an infant or child and techniques for successful interaction.
6. Determine appropriate airway adjuncts and ventilation devices for infants and children and complications of improper use of these devices.
7. Discuss appropriate tracheal intubation equipment for infants and children.
8. Identify complications of an improper tracheal intubation procedure in infants and children.
9. List the indications for gastric decompression for infants and children.
10. Discuss age-appropriate vascular access sites and necessary equipment for infants and children.
11. Identify complications of vascular access for infants and children.
12. Discuss appropriate transport guidelines for infants and children.
13. Discuss appropriate receiving facilities for low- and high-risk infants and children.
14. Differentiate upper airway obstruction from lower airway disease.
15. Define respiratory distress, failure, and arrest and describe the general approach to the treatment of a child with each of these conditions.
16. Describe the etiology, epidemiology, history, and physical findings of croup, epiglottitis, and bacterial tracheitis.
17. By using the patient history and physical examination findings, develop a treatment plan for a patient who has croup, epiglottitis, or bacterial tracheitis.
18. Describe the etiology, epidemiology, history, and physical findings of asthma, bronchiolitis, and pneumonia.
19. By using the patient history and physical examination findings, develop a treatment plan for a patient who has asthma, bronchiolitis, or pneumonia.
20. Describe the etiology, epidemiology, history, and physical findings of shock in infants and children.
21. By using the patient history and physical examination findings, develop a treatment plan for a patient in shock.
22. Identify the major classifications of pediatric cardiac rhythms.
23. Describe the etiology, epidemiology, history, and physical findings of cardiac dysrhythmias in infants and children.
24. By using the patient history and physical examination findings, develop a treatment plan for a patient who has a cardiac dysrhythmia.
25. Discuss the primary causes of cardiopulmonary arrest in infants and children.
26. Describe the primary causes of altered mental status in infants and children.
27. Describe the etiology, epidemiology, history, and physical findings of neurologic emergencies in infants and children.
28. By using the patient history and physical examination findings, develop a treatment plan for a patient who has a neurologic emergency.
29. Identify common lethal mechanisms of injury in infants and children.
30. Discuss anatomic features of children that predispose or protect them from certain injuries.
31. Describe the pathophysiology, assessment, and treatment of infants and children with trauma.
32. Describe aspects of infant and child airway management affected by potential cervical spine injury.
33. Identify infant and child trauma patients who require spinal immobilization.
34. Discuss fluid management and shock treatment for infant and child trauma patients.
35. Determine when pain management and sedation are appropriate for infants and children.
36. Define *child abuse* and *child neglect*.
37. Define *sudden infant death syndrome* and describe its etiology, epidemiology, history, and physical findings.
38. Discuss the parent and caregiver responses to the death of an infant or child.
39. Identify appropriate parameters for performing infant and child cardiopulmonary resuscitation.
40. Define *children with special healthcare needs* and *technology assistance*.
41. Discuss the unique assessment and treatment considerations for a child with special healthcare needs.

Affective-

1. Demonstrate and advocate appropriate interactions with the infant/ child that conveys an understanding of their developmental stage.
2. Recognize the emotional dependence of the infant/ child to their parent/ guardian.

3. Recognize the emotional impact of the infant/ child injuries and illnesses on the parent/ guardian.
4. Recognize and appreciate the physical and emotional difficulties associated with separation of the parent/ guardian of a special needs child
5. Demonstrate the ability to provide reassurance, empathy and compassion for the parent/ guardian.

Overview of Semester 2 Class Schedule:

WEEK #	NRPM 108	NRPM 109	NRPM 111	NPRM 111L	NRPM 110	NRPM 112	NRPM 113	Total hrs/day
1	3		5					8
2		2	5		1			8
3		2	5		1			8
4		2		5	1			8
5				5			3	8
6				5			3	8
7	5						3.5	8.5
8	5						3.5	8.5
9	5				1		2.5	8.5
10	5				1		2.5	8.5
11		6			1		1.5	8.5
12		6			1		1.5	8.5
13		6			1		1.5	8.5
14					1		7.5	8.5
15					1		7.5	8.5
16							8.5	8.5
17						4	4.5	8.5
18						4	4.5	8.5
	23	24	15	15	10	8	55	150

Course Legend:	Req. Hrs:	Classes will meet on Tuesdays	
		Start Time	End Time
NRPM 108: Basic ECG Interpretation and Cardiopulmonary Emergency Care	23	900	~1400
NRPM 109: Advanced ECG Interpretation & Cardiopulmonary Emergency Care	24	900	~1500
NRPM 111: Maternal and Child Emergency Care	15	~1300	~1800
NRPM 111L: Maternal and Child Emergency Care Lab	15	~1300	~1800
NRPM 110: Medical Emergency Pre-Hospital Care	10	~1500	~1600
NRPM 112: Special Considerations in Pre-Hospital Care	8	900	1300
*NRPM 113: Simulation Lab 1	55	~1300	1830
**NRPM 114: Clinical Practicum 1	72	Based on student avail.	
	222		