

# NRPM 103: Introduction to Clinical Medicine & Assessment Syllabus

[Semester and year]



## Instructor information

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

## General information

### Description

Paramedic students will apply skills in therapeutic communication to integrate scene and patient assessment findings with knowledge of lifespan development, epidemiology, and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Finally, participants will acquire the skills to correctly place monitoring devices such as 12 lead ECG's and obtain information from basic blood chemistry. *Co-Requisites: NRPM 102L*

### Expectations and goals

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

- Successfully perform the following skills without critical error:
  - 12 Lead ECG Placement
  - Patient Assessment - Medical
- Establish patient rapport while gathering a comprehensive patient history
- Perform the techniques of the comprehensive physical examination including all anatomical regions.
- Discuss all aspects of the steps involved in patient assessment including the scene size up, initial assessment, focused and detailed exam, and ongoing assessment.
- Explain the steps in clinical decision making.
- Demonstrate critical thinking skills under pressure during simulated patient encounters.
- Demonstrate effective verbal and written communication skills in patient care continuum.

**Course Delivery Method: Hybrid**

## Course materials

### Required materials

Computer with Internet capabilities to access:

- <https://canvas.instructure.com/>
- <https://www.platinumplanner.com/>

### Optional materials

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### Required text

- Nancy Caroline's Emergency Care in the Streets; 8<sup>th</sup> 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 sessions | Reflective Assignment<br><i>(DUE: Friday after class session)</i> |
|--|-------|----------------------|----------------|---|
| <b>PLEASE SEE TEAMUP CALENDAR FOR SCHEDULE DETAILS:</b><br><a href="https://teamup.com/ksqsu19g123to895tj">https://teamup.com/ksqsu19g123to895tj</a> |       |                      |                |   |

### 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.
- C. Individual skills that comprise a skill lab are mandatory per the National Registry of EMT's. A student must complete each skill with the minimum points required AND the established number of SUCCESSFUL attempts meeting those minimum point standards. A grade will be issued to the student based on their participation in lab sessions and their reporting in platinum planner.
- D. Late submission of platinum documentation will receive a 10-point deduction in grade for each class day in which it wasn't handed in.

**\*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 Courses   | Skill Lab  |
|--|--|
| <b>80% Coursework</b> <ul style="list-style-type: none"> <li>• Homework/Special Projects - 5%</li> <li>• Quizzes - 5%</li> <li>• Case Studies/Objectives - 20%</li> <li>• Exams - 50%</li> </ul> | <b>Skill Lab: Pass/Fail</b> ( <i>minimum points required per skill</i> ) |
| <b>20% Monthly Behavioral Evaluations</b>  |  |

| Items required for skill labs | Minimum Points Required | Total Items required in Peer Review | Total Instructor Review |
|-------------------------------|-------------------------|-------------------------------------|-------------------------|
| 12 Lead ECG Placement         | 30                      | 2                                   | 1                       |
| Patient Assessment - Medical  | 36                      | 2                                   | 1                       |

### 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 103 Course Objectives:

1. Identify the components of the patient assessment process and the most important determination made by the paramedic—whether the patient is sick versus not sick.
2. Describe how to determine the mechanism of injury (MOI) or nature of illness (NOI) at an emergency and the importance of differentiating trauma patients from medical patients.
3. Discuss some of the possible hazards that may be present at an emergency scene, ways to recognize them, and precautions to protect personal safety.
4. List the minimum standard precautions that should be followed and personal protective equipment that should be worn at an emergency scene, including examples of when additional precautions would be appropriate.
5. Describe the principal goals of the primary assessment process: to identify and treat life threats and to determine whether immediate transport is required.
6. Explain the process of forming a general impression of a patient as part of the primary assessment and the reasons why this step is critical to patient management.
7. Describe the assessment of airway status in patients who are responsive and unresponsive, and give examples of possible signs and causes of airway obstruction in each case as well as the appropriate response by the paramedic.
8. Describe the assessment of a patient's breathing status, including the key information the paramedic must obtain during this process and the care required for patients who have adequate and inadequate breathing.
9. Describe the assessment of a patient's circulatory status, including the different methods for obtaining a pulse and appropriate management depending on the patient's status
10. Describe the assessment of a patient's skin color, temperature, and condition, providing examples of both normal and abnormal findings and the information this provides related to the patient's status.
11. Explain the process for determining the priority of patient care and transport at an emergency scene, and give examples of conditions that necessitate immediate transport
12. Discuss the process of obtaining a history, including its purpose and the initial approach to a patient.
13. Describe examples of different techniques a paramedic may use to obtain full and accurate information from patients during the history-taking process.
14. Identify the elements of the history to be obtained from responsive medical patients, from family or bystanders in the case of unresponsive medical patients, and with trauma patients
15. Recognize which aspects of the various body systems should be covered during the history-taking process.
16. Be able to apply clinical reasoning based on the primary assessment and history-taking results to the patient's unique case.
17. Discuss different challenges a paramedic may face when obtaining a patient history, including collection of information on sensitive topics, and strategies a paramedic may use to facilitate each situation.
18. Appreciate the unique challenges that arise with history taking with pediatric and geriatric patients.
19. Explain the purpose of performing a secondary assessment, the various assessment techniques, and equipment used in the secondary assessment.
20. Explain the importance of assessing a patient's mental status, and give examples of different methods used to assess alertness, responsiveness, and orientation.
21. Describe normal and abnormal types of lung sounds that may be heard during auscultation.

22. Explain general (systemic) conditions considered during the secondary assessment, and then give examples by body system of what the secondary assessment should include based on a patient's chief complaint.
23. Describe the devices that are used for monitoring a patient's condition during both the secondary assessment and reassessment, including continuous and 12-lead ECG monitoring, carbon dioxide monitoring, and basic blood chemistry.
24. Explain the importance of performing a reassessment of the patient, including reassessment of the patient's mental status and ABCs, as well as reassessment of any interventions applied and transport priority.

#### Skills Objectives

1. Demonstrate the techniques for assessing a patient's airway, and correctly obtain information related to respiratory rate, rhythm, quality/character of breathing, and depth of breathing.
2. Demonstrate how to assess a patient's circulation by evaluating pulses and assessing the skin color and temperature.
3. Demonstrate how to perform a rapid exam.
4. Demonstrate how to evaluate a patient's orientation and document his or her status correctly.
5. Demonstrate how to perform percussion as an assessment technique.
6. Demonstrate how to perform a full-body exam for patients with potentially serious—and potentially hidden—injuries.
7. Demonstrate how to obtain a patient's orthostatic vital signs to assess the extent of any internal bleeding.
8. Demonstrate how to examine a patient's head.
9. Demonstrate how to perform a general eye examination.
10. Demonstrate how to perform an eye examination with an ophthalmoscope.
11. Demonstrate how to perform an ear examination with an otoscope.
12. Demonstrate how to examine a patient's neck for injury.
13. Demonstrate how to examine a patient's chest, including auscultation of lung fields.
14. Demonstrate how to auscultate heart sounds.
15. Demonstrate how to examine a patient's abdomen, including use of the techniques of inspection, auscultation, percussion, and palpation.
16. Demonstrate how to examine a patient's musculoskeletal system.
17. Demonstrate how to examine a patient's peripheral vascular system, including both the upper and lower extremities.
18. Demonstrate how to examine a patient's spine for abnormalities, including use of palpation and range-of-motion evaluation.
19. Demonstrate how to perform a neurologic examination, including use of the COASTMAP mnemonic and the AVPU scale to test for patient responsiveness.
20. Demonstrate how to evaluate deep tendon reflexes and score the patient's responses

#### Affective-

1. Demonstrate the importance of empathy when obtaining a health history.
2. Demonstrate the importance of confidentiality when obtaining a health history.
3. Demonstrate a caring attitude when performing physical examination skills.
4. Discuss the importance of a professional appearance and demeanor when performing physical examination skills.

5. Appreciate the limitations of conducting a physical exam in the out-of-hospital environment.
6. Explain the rationale for crew members to evaluate scene safety prior to entering.
7. Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness.
8. Explain the importance of forming a general impression of the patient.
9. Explain the value of performing an initial assessment.
10. Demonstrate a caring attitude when performing an initial assessment.
11. Attend to the feelings that patients with medical conditions might be experiencing.
12. Value the need for maintaining a professional caring attitude when performing a focused history and physical examination.
13. Explain the rationale for the feelings that these patients might be experiencing.
14. Demonstrate a caring attitude when performing a detailed physical examination.
15. Explain the value of performing an on-going assessment.
16. Recognize and respect the feelings that patients might experience during assessment.
17. Explain the value of trending assessment components to other health professionals who assume care of the patient.
18. Show appreciation for proper terminology when describing a patient or patient condition.

#### **Critical Thinking and Clinical Decision Making**

25. List and explain the four cornerstones of effective paramedic practice: (1) gathering, evaluating, and synthesizing; (2) developing and implementing a patient care plan; (3) using judgment and independent decision making; and (4) thinking and working under pressure.
26. Explain the benefits and drawbacks of patient protocols or standing orders and patient care algorithms in the EMS system in which you work.
27. Explain how to distinguish patients with critical life threats from those in serious condition and those with minimal non-life-threatening injuries.
28. Describe the stages of critical thinking and thought processes in the prehospital setting: concept formation, data interpretation, application of principle, reflection in action, and reflection on action.
29. List and explain the six *Rs* of critical thinking: (1) Read the scene; (2) Read the patient; (3) React; (4) Reevaluate; (5) Revise the plan; and (6) Review your performance.

#### **Affective-**

30. Defend the position that clinical decision making is the cornerstone of effective paramedic practice.
31. Practice facilitating behaviors when thinking under pressure.
32. Identify the importance of communications when providing EMS.
33. Identify the role of verbal and electronic communications in the provision of EMS.
34. Describe the phases of communications necessary to complete a typical EMS event.
35. Identify the importance of proper terminology when communicating during an EMS event.
36. List factors that impede effective verbal communications.
37. List factors that enhance verbal communications.
38. Identify technology used to collect and exchange patient and/or scene information electronically.
39. Recognize the legal status of patient medical information exchanged electronically.



40. Identify the components of the local EMS communications system, and describe their function and use.
41. Identify and differentiate among the following communications systems
  - a. Simplex
  - b. Multiplex
  - c. Duplex
  - d. Trunked
  - e. Digital communications
  - f. Cellular telephone
  - g. Computer
42. Identify components of the local dispatch communications system, and describe their function and use.
43. Describe the functions and responsibilities of the Federal Communications Commission.
44. Describe how an EMS dispatcher functions as an integral part of the EMS team.
45. Identify the role of the emergency medical dispatcher in a typical EMS event.
46. Identify the importance of prearrival instructions in a typical EMS event.
47. Describe the purpose of verbal communication of patient information to the hospital.
48. List information that should be included in patient assessment information verbally reported to medical direction.
49. Identify internal and external factors that affect a patient/bystander interview conducted by a paramedic.
50. Discuss the strategies for developing patient rapport.
51. Provide examples of open-ended and closed-ended questions.
52. Discuss common errors made by paramedics when interviewing patients.
53. Identify the nonverbal skills that are used in patient interviewing.
54. Discuss strategies to obtain information from a patient.
55. Summarize the methods to assess mental status based on interview techniques.
56. Differentiate the strategies a paramedic uses when interviewing a patient who is hostile compared with one who is cooperative.
57. Summarize developmental considerations of various age groups that influence patient interviewing.
58. Discuss unique interviewing techniques necessary to employ with patients who have special needs.
59. Discuss interviewing considerations used by paramedics in cross-cultural communications.
60. Describe the purpose of documentation.
61. Identify the information required in a patient care report (PCR).
62. Explain the legal implications of the patient care report.
63. Discuss the implications of the Health Insurance Portability and Accountability Act of 1996 as they relate to documentation.
64. List standard items that must be documented for every emergency call.
65. Discuss the process for documenting transfer of care, and special considerations surrounding documentation.
66. Discuss state and/or local special reporting requirements, including multiple-casualty incidents, exposure situations, involvement of other agencies, workplace injuries, interfacility transfers, and potential abuse or neglect.



67. Understand how to document refusal of care, including the legal implications.
68. Compare handwritten reporting with electronic reporting, and discuss the pros and cons of each.
69. Discuss various types of formats for the narrative portion of the patient care report.
70. Discuss why it is important that documentation be accurate, legible, and professional.
71. Explain the procedure to follow should an error occur during or after creating a patient care report.
72. Discuss the consequences of intentional falsification of documentation.
73. Discuss the importance of being familiar with medical terminology.

#### **Affective-**

1. Advocate among peers the relevance and importance of properly completed documentation.
2. Resolve the common negative attitudes toward the task of documentation.

#### **Skills Objectives**

1. Demonstrate completion of a patient care report.
2. Understand the terms used to designate the following age groups: infants, toddlers, preschoolers, school-age children, adolescents (teenagers), early adults, middle adults, and late adults.
3. Describe the major physiologic and psychosocial characteristics of an infant's life.
4. Describe the major physiologic and psychosocial characteristics of a toddler and preschooler's life.
5. Describe the major physiologic and psychosocial characteristics of a school-age child's life.
6. Describe the major physiologic and psychosocial characteristics of an adolescent's life.
7. Describe the major physiologic and psychosocial characteristics of an early adult's life.
8. Describe the major physiologic and psychosocial characteristics of a middle adult's life.
9. Describe the major physiologic and psychosocial characteristics of a late adult's life.

### Overview of Semester Class Schedule:

|        | NRPM 101 | NRPM 102 | NRPM 102L | NPRM 103 | NRPM 104 | NRPM 104L | NRPM 106 | NRPM 106L | Total hrs/day |
|--------|----------|----------|-----------|----------|----------|-----------|----------|-----------|---------------|
| WEEK # |          |          |           |          |          |           |          |           |               |
| 1      | 5        |          |           |          | 2.5      | 0.83      |          |           | 8.33          |
| 2      | 5        |          |           |          | 2.5      | 0.83      |          |           | 8.33          |
| 3      | 5        |          |           |          | 2.5      | 0.83      |          |           | 8.33          |
| 4      | 5        |          |           |          | 2.5      | 0.83      |          |           | 8.33          |
| 5      |          | 2        | 3         |          | 2.5      | 0.83      |          |           | 8.33          |
| 6      |          | 2        | 3         |          | 2.5      | 0.83      |          |           | 8.33          |
| 7      |          | 2        | 3         |          | 2.5      | 0.83      |          |           | 8.33          |
| 8      |          | 2        | 3         |          | 2.5      | 0.83      |          |           | 8.33          |
| 9      |          | 2        | 3         |          | 2.5      | 0.83      |          |           | 8.33          |
| 10     |          |          |           | 2.2      | 2.5      | 0.83      | 1.2      | 1.6       | 8.33          |
| 11     |          |          |           | 2.2      | 2.5      | 0.83      | 1.2      | 1.6       | 8.33          |
| 12     |          |          |           | 2.2      | 2.5      | 0.83      | 1.2      | 1.6       | 8.33          |
| 13     |          |          |           | 2.2      | 2.5      | 0.83      | 1.2      | 1.6       | 8.33          |
| 14     |          |          |           | 2.2      | 2.5      | 0.83      | 1.2      | 1.6       | 8.33          |
| 15     |          |          |           | 2        | 2.5      | 0.83      | 1.4      | 1.6       | 8.33          |
| 16     |          |          |           | 2        | 2.5      | 0.85      | 2        | 1         | 8.35          |
| 17     |          |          |           | 2        | 2.5      | 0.85      | 1        | 2         | 8.35          |
| 18     |          |          |           | 2        | 2.5      | 0.85      | 0.6      | 2.4       | 8.35          |
|        | 20       | 10       | 15        | 19       | 45       | 15        | 11       | 15        | 150           |

|  |           | Classes will meet on Tuesdays |          |
|--|-----------|-------------------------------|----------|
| Course Legend:   |           |                               |          |
|  | Req. Hrs: | Start Time                    | End Time |
| NRPM 101: Introduction to Emergency Medical Care               | 20        | 1300                          | 1800     |
| NRPM 102: Medical Math and Pharmacological Principles          | 10        | 1300                          | 1500     |
| NRPM 102L: Pharmacological Techniques                          | 15        | 1500                          | 1800     |
| NRPM 103: Introduction to Clinical Medicine & Assessment       | 19        | 1300                          | 1515     |
| NRPM 104: Anatomy & Physiology for Emergency Medical Care      | 45        | 900                           | 1130     |
| NRPM 104L: Anatomy & Physiology for Emergency Medical Care Lab | 15        | 1130                          | 1230     |
| NRPM 106: Airway and Injury Management in the Field            | 11        | 1515                          | 1630     |
| NRPM 106L: Airway and Injury Management in the Field Lab       | 15        | 1630                          | 1800     |
|  | 150       |                               |          |