

# KINGSBOROUGH COMMUNITY COLLEGE

The City University of New York  
Department of Nursing- Paramedic Program

**EMS 211 – Paramedic I Clinical**

**Prerequisites:** Bio 12, Eng 24, Psy 11, any 3-credit math course

**Credit Hours:** 2

**Class schedule:** Hospital clinical rotation: Mon OR Tue OR Wed OR Thur: 8AM-4PM AND  
Lecture/ skills on Fri: 9:10AM-5:10PM

**Course Syllabus:** Fall 2014

**Co-requisites:** EMS 210

**Contact Hours:** 15

**Catalogue Description**

This clinical course covers the New York State Department of Health Bureau of Emergency Medical Services curriculum for preparation as a paramedic. It is designed to introduce the student to the clinical aspect in the field of emergency medical services in specific areas of preparatory and advanced airway in the setting of a hospital department (clinical) and/or ambulance (field). Students will participate in a series of clinical/field rotations of 8-hour shifts either in a hospital department or on an ambulance. Clinical/ field rotations include areas such as adult and pediatric emergency departments, critical care units, morgue, operating room, psychiatric units, labor and delivery, other hospital departments (as needed) and basic and advanced life support ambulances. Lab work includes: patient assessment and management; bleeding control; fracture management; intravenous (IV) access techniques; endotracheal intubation; calculating dosages; preparing medications for administration; and practice in all administration techniques. Skills are subsequently demonstrated and evaluated in the laboratory, hospital and/or field setting. The number of minimum patient experiences is delineated. Some students, however, may be required to schedule additional shifts to acquire an acceptable minimum of competencies and experiences. Students must satisfactorily perform all practical skills in order to successfully complete the course. This course is the first of a four-course clinical sequence. **NOTE:** Since paramedic students are already NYS-certified EMTs, they are expected to participate in patient care (under direct supervision of a preceptor) up to their level of training.

**Course Overview**

This course will provide students hands on training and exposure to patients in various departments at approved clinical sites. In addition to the clinical rotation at a hospital, the student will have lecture and laboratory to gain proficiency in various skills and techniques regarding advanced medical care. The course meets 15 hours each week (8 hours clinical at hospital, 7 hours lecture/skills). In addition to the clinical rotations at a hospital, the student will be required to participate in rotations on basic life support and advanced life support ambulances.

**Student Learning Outcomes**

**Assessment Measures**

1. Understand his/her role and responsibilities within an EMS system as a Paramedic, and how these roles/responsibilities differ from other levels of providers.	Through classroom discussions, high fidelity simulation activities, assignments and examinations, the students will demonstrate mastery of the required curriculum of the New York State Department of Health Bureau of Emergency Medical Services for certification as a Paramedic.
2. Practice patient assessment skills on patients presenting with a range of emergency conditions.	The students will demonstrate entry-level competence in recognizing signs and symptoms of different emergency medical and traumatic conditions. The competence will be determined by didactic and practical examinations and assessed in the clinical sites and simulation lab in accordance with the New York State Department of Health Paramedic curriculum.
3. Assess and develop triage skills with selected patients and determine the appropriate treatment modalities for the emergency care of the patients.	The students will demonstrate entry-level competence in assessing and determining the appropriate treatment modalities for emergency care. The competence will be determined by didactic and practical examinations and assessed in the clinical sites and simulation lab in accordance with the New York State Department of Health Paramedic curriculum.
4. Administer appropriate emergency medical care in accordance to the presenting condition of the patient under the supervision of the clinical instructor.	The students will demonstrate entry-level competence in administering appropriate medical care according to the presenting condition of the patient. The competence will be determined by didactic and practical examinations and assessed in the clinical sites and simulation lab in accordance with the New York State Department of Health Paramedic curriculum.
5. Gain experience in the techniques of basic and advanced airway management and ventilation.	The students will demonstrate entry-level competence in basic and advanced airway management and maintenance. The competence will be determined by didactic and practical examinations and assessed in the clinical sites and simulation lab in accordance with the New York State Department of Health Paramedic curriculum.



The Department of Nursing adheres to the Policies and Procedures on Academic Integrity as set forth by CUNY. See the Paramedic Student Handbook, the KCC Catalog and website for further details. Students are expected to take all tests when scheduled. Exceptions to this rule will be for emergency situations and the faculty must know in advance. Students who do not take a test on the scheduled date are required to take a makeup test. All makeup tests will be given at the end of the semester. Students who fail to take the scheduled exams or makeup will receive a grade of zero for that test. All written assignments must comply with college standards for written work. Written assignments are to be turned in during the class period on the date that they are due. Assignments submitted via email must be received before 12:00 AM on the due date. All other submissions will not be graded. All assignments must be handed in by the end of the course to complete the requirements of the course. A late assignment will meet the requirements of the course but will not receive full credit. If written assignments are not submitted by the end of the course, the student will receive a grade of "F" for the course.

A conference with the instructor is required at mid-semester and at the end of the course to discuss the student's progress. Students may arrange a conference / appointments through the Paramedic Office, T280, or calling (718) 368-6720 to schedule an appointment.

### **Retention Criteria** (from 2014-15 catalog)

Criteria for retention in the Paramedic Program mandate that students must:

1. Receive no more than two grades below "C" in any pre-requisite or co-requisite courses.
2. Earn a minimum grade of "C" in all EMS courses.
3. Earning less than a C in an EMS course may repeat the course one time (subject to space availability). The minimum grade for courses that are repeated is a B.
4. Who earn a second grade of less than "C" will result in the student's dismissal from the program.
5. Must perform at a satisfactory level in all clinical courses in order to remain in the program

Any student who has not attended EMS courses for two or more consecutive semesters cannot be readmitted into the Paramedic Program unless qualifying examinations have been passed in sequential order of the courses previously completed. These qualifying examinations can be repeated only once. In addition, the student must demonstrate clinical competency by passing a clinical practical examination prior to returning to any of the clinical courses.

### **Fatigue**

Fatigue can certainly impair a health care worker's ability to provide safe, professional care. Thus KCC's Nursing Department states, "All students need to carefully assess his/her level of fatigue, school requirements in terms of lecture, on-campus labs and clinical experiences and own work schedules. This assessment should carefully consider the potential impact of excessive employment on his/her ability to provide safe, professional care. Each student has an ethical responsibility to ensure that fatigue does not negatively impact student responsibilities."

### **Topical Outline**

- EMT medical patient assessment, EMT trauma patient assessment
- Hospital operations, clinical lab assessment skills
- 3 lead EKG placement, pulse oximetry, blood glucometry, medical math
- IO access, IV access, drug dosage calculation
- IV drip, SQ/IM, IV bolus medication administration
- Endotracheal intubation, alternative advanced airway, chest decompression
- CPAP
- High fidelity simulation scenarios, autopsy observation at Office of Chief Medical Examiner Office
- Clinical rotations in: adult emergency department, pediatric emergency department, psychiatric emergency department, operating room and basic life support (BLS) and advanced life support (ALS) ambulances

## Topical Outline Schedule

<u>Date</u>	<u>Topic</u>	<u>Assignments/Readings/Comments</u>
		<u>Textbook: AAOS, Nancy Caroline's Emergency Care in the Streets 7<sup>th</sup> Edition (referred to as AAOS hereafter)</u>
<b><u>Thursday</u></b> <b><u>9/4/14</u></b>	<u>Class Topic: Orientation</u> <u>Simulation at KCC SIM LAB</u>	
<b><u>Friday</u></b> <b><u>9/5/14</u></b> <b><u>PM</u></b>	<u>Class Topic: A &amp; P 1</u> <ul style="list-style-type: none"> <li>• <u>Topographic Anatomy</u></li> </ul> <u>Class Topic: A &amp; P 2-Atoms, Molecules, and Chemical Bonds</u> <ul style="list-style-type: none"> <li>• <u>Atomic structure</u></li> <li>• <u>Molecules</u></li> <li>• <u>Chemical bonds</u></li> <li>• <u>Types of chemical reactions</u></li> <li>• <u>Enzymes</u></li> <li>• <u>Acids, bases, and the pH scale</u></li> <li>• <u>Inorganic and organic substances</u></li> </ul>	<u>AAOS: Chapter 7 182-189 and 189-194</u>
<b><u>Monday-Thur</u></b> <b><u>9/8/14-</u></b> <b><u>9/11/14</u></b>	<u>Simulation practice at KCC SIM LAB</u>	<u>AAOS: Chapter 7 194-208</u> <u>AAOS: Chapter 7 208-232</u> <u>AAOS: Chapter 7 232-255</u>
<b><u>Friday</u></b> <b><u>9/12/14</u></b>	<u>Class Topic: A&amp;P 6</u> <ul style="list-style-type: none"> <li>• <u>Lymphatic System</u></li> <li>• <u>Nervous System (CNS, PNS, Physiology of sensation)</u></li> </ul> <u>Class Topic: A&amp;P 7</u> <ul style="list-style-type: none"> <li>• <u>Integumentary System</u></li> <li>• <u>Digestive System Anatomy</u></li> <li>• <u>Digestive System Physiology</u></li> </ul>	<u>AAOS: Chapter 7 255-281</u> <u>Dubins Chapter 1; Basic Principals</u>
<b><u>Monday-Thur</u></b> <b><u>9/15/14-</u></b> <b><u>9/18/14</u></b>	<u>Simulation practice at KCC SIM LAB</u>	<u>AAOS: Chapter 7 281-313</u> <u>AAOS: Chapter 8 334-346</u> <u>AAOS: Chapter 8 347-357</u>
<b><u>Friday</u></b> <b><u>9/19/14</u></b>	<u>Class Topic: Pathophysiology 3</u> <ul style="list-style-type: none"> <li>• <u>Factors that Cause Disease – risk factors, analysis of risk, familial diseases and associated risk factors</u></li> <li>• <u>Hypoperfusion</u></li> <li>• <u>Types of Shock – central/peripheral, management of shock</u></li> <li>• <u>Multiple Organ Dysfunction Syndrome (MODS)</u></li> </ul> <u>Class Topic: Pathophysiology 4</u> <ul style="list-style-type: none"> <li>• <u>The Body's Self-Defense Mechanisms – anatomic barriers, immune response, inflammatory response, chronic inflammatory response</u></li> <li>• <u>Variances in Immunity and Inflammation – hypersensitivity, immune deficiencies</u></li> <li>• <u>Stress and Disease – general adaptation syndrome, effects of chronic stress</u></li> </ul>	<u>AAOS: Chapter 8 357-392</u>
<b><u>Monday-Thur</u></b> <b><u>9/22/14-</u></b> <b><u>9/25/14</u></b>	<u>Morgue rotation</u>	<u>AAOS: Chapter 10 423-440</u> <u>AAOS: Chapter 10 440-450</u>

<b>Wednesday</b> <u>9/24/14</u>	Day Off- No Classes	
<b>Thursday</b> <u>9/25/14</u>	Day Off- No Classes	
<b>Friday</b> <u>9/26/14</u>	Day Off- No Classes	
<b>Monday-Thur</b> <u>9/29/14-10/2/14</u>	Hospital rotation: adult ED	AAOS: Chapter 11 469-490 AAOS: Chapter 11 490-502 AAOS: Chapter 11 502-515
<b>Friday</b> <u>10/3/14</u>	Day Off- No Classes	
<b>Monday-Thur</b> <u>10/6/14-10/9/14</u>	Hospital rotation: adult ED	AAOS: Chapter 11 515-539 AAOS: Chapter 10 450-464 AAOS: Chapter 10 Review Chapter
<b>Friday</b> <u>10/10/14</u>	<b>Psychomotor Skill Class (AM)</b> <ul style="list-style-type: none"> <li>• <u>3 Lead EKG Placement (1-D)</u></li> <li>• <u>Pulse oximetry (1-D)</u></li> <li>• <u>Blood Glucometry (1-D)</u></li> </ul> <b>Psychomotor Skill Class (PM)</b> <ul style="list-style-type: none"> <li>• <u>IV Access (1-A)</u></li> <li>• <u>IO Access (1-A)</u></li> <li>• <u>Drug dosage calculations (1-A)</u></li> </ul>	<u>AM Session: Skills competency tested.</u>  <u>PM Session: Introduction of new subjects</u>
<b>Monday</b> <u>10/13/14</u>	Day Off- College Closed	
<b>Tuesday-Thur</b> <u>10/14/14-10/16/14</u>	Hospital rotation: adult ED	AAOS: Chapter 12 545-548 576-579 AAOS: Chapter 13 586-625
<b>Friday</b> <u>10/17/14</u>	<b>Psychomotor Skill Class</b> <ul style="list-style-type: none"> <li>• <u>IV Access (3-B)</u></li> <li>• <u>IO Access (3-B)</u></li> <li>• <u>Drug dosage calculations (3-B)</u></li> </ul>	
<b>Monday-Thur</b> <u>10/20/14-10/23/14</u>	Hospital rotation: adult ED	AAOS: Chapter 13 626-688 AAOS: Chapter 14 694-706 AAOS: Chapter 15 710-736 AAOS: Chapter 15 790-812
<b>Friday</b> <u>10/24/14</u>	<p style="text-align: center;"><b>MIDTERM</b></p> <b>Psychomotor Skill Class</b> <ul style="list-style-type: none"> <li>• <u>IV Access (5-D)</u></li> <li>• <u>IO Access (5-D)</u></li> <li>• <u>Drug dosage calculations (5-B)</u></li> </ul>	<u>A = Whole-Part-Whole</u> <u>B = Transitional Learning</u> <u>C = Problem Based Learning</u> <u>D = Competency Testing</u>
<b>Monday-Thur</b> <u>10/27/14-10/30/14</u>	Hospital rotation: adult ED	AAOS: Chapter 15 736-756 AAOS: Chapter 15 756-789
<b>Friday</b> <u>10/31/14</u>	<b>Psychomotor Skill Class</b> <ul style="list-style-type: none"> <li>• <u>Drug dosage calculations (7-B)</u></li> <li>• <u>IV drip medication administration (2-B)</u></li> <li>• <u>SQ/IM medication administration (2-B)</u></li> </ul>	<u>Halloween</u> <u>A = Whole-Part-Whole</u> <u>B = Transitional Learning</u> <u>C = Problem Based Learning</u>

	<ul style="list-style-type: none"> <li>• <u>IV Bolus medication administration (2-B)</u></li> </ul>	<u>D = Competency Testing</u>
<u>Monday-Thur</u> <u>11/3/14-11/6/14</u>	Hospital rotation: adult ED, OR	AAOS: Chapter 814-838
<u>Friday</u> <u>11/7/14</u>	<b><u>Psychomotor Skill Class</u></b> <ul style="list-style-type: none"> <li>• <u>IV drip medication administration (4-D)</u></li> <li>• <u>SQ/IM medication administration (4-D)</u></li> <li>• <u>IV Bolus medication administration (4-D)</u></li> </ul>	<u>A = Whole-Part-Whole</u> <u>B = Transitional Learning</u> <u>C = Problem Based Learning</u> <u>D = Competency Testing</u>
<u>Monday-Thur</u> <u>11/10/14-11/13/14</u>	Hospital rotation: adult ED, OR  <u>Class Topic: Respiratory Emergencies 1</u> <ul style="list-style-type: none"> <li>• <u>Epidemiology</u></li> <li>• <u>Hypoventilation</u></li> <li>• <u>Hyperventilation</u></li> <li>• <u>Anatomy and Physiology review</u></li> <li>• <u>Assessment of a Patient With Dyspnea</u></li> <li>• <u>Emergency Medical Care – ensure an adequate airway, decrease the work of breathing, provide supplemental oxygen, vasodilator administration</u></li> </ul>	<u>AAOS: Chapter 16 850-883</u> <u>AAOS: Chapter 16 883-892</u> <u>AAOS: Chapter 16 892-901</u>
<u>Friday</u> <u>11/14/14</u>	<b><u>Psychomotor Skill Class</u></b> <ul style="list-style-type: none"> <li>• <u>Medication administration (6-D)</u></li> <li>• <u>Endotracheal Intubation (1-A)</u></li> <li>• <u>Alternative Advanced Airways (1-A)</u></li> <li>• <u>Chest Decompression (1-A)</u></li> <li>• <u>CPAP (1-A)</u></li> </ul>	<u>A = Whole-Part-Whole</u> <u>B = Transitional Learning</u> <u>C = Problem Based Learning</u> <u>D = Competency Testing</u>
<u>Monday-Thur</u> <u>11/17/14-11/20/14</u>	Hospital rotation: adult ED, OR	<u>AAOS: Chapter 16 888-898 (review)</u> <u>AAOS: Chapter 13 607, 649-652 (review)</u> <u>AAOS: Chapter 9 400-416</u> <u>AAOS: Chapter 13 Review</u>
<u>Friday</u> <u>11/21/14</u>	<b><u>Psychomotor Skill Class</u></b> <ul style="list-style-type: none"> <li>• <u>Endotracheal Intubation (2-B)</u></li> <li>• <u>Alternative Advanced Airways (2-B)</u></li> <li>• <u>Chest Decompression (2-B)</u></li> <li>• <u>CPAP (2-B)</u></li> </ul>	<u>A = Whole-Part-Whole</u> <u>B = Transitional Learning</u> <u>C = Problem Based Learning</u> <u>D = Competency Testing</u>
<u>Monday-Wed</u> <u>11/24/14-11/26/14</u>	Hospital rotation: adult ED, OR	<u>AAOS: Chapter 1 4-28</u> <u>AAOS: Chapter 2 32-58</u> <u>AAOS: Chapter 3 60-83</u>
<u>Thursday</u> <u>11/27/14</u>	Thanksgiving; Day Off- No Classes	
<u>Friday</u> <u>11/28/14</u>	Day Off- No Classes	
<u>Monday-Thur</u> <u>12/1/14-12/4/14</u>	Hospital rotation: adult ED, OR	<u>AAOS: Chapter 4 85-114</u> <u>AAOS: Chapter 5 120-143</u> <u>AAOS: Chapter 6 148-177</u>
<u>Friday</u> <u>12/5/14</u>	<b><u>Psychomotor Skill Class</u></b> <ul style="list-style-type: none"> <li>• <u>Endotracheal Intubation (4-D)</u></li> <li>• <u>Alternative Advanced Airways (4-D)</u></li> <li>• <u>Chest Decompression (4-D)</u></li> <li>• <u>CPAP (4-D)</u></li> <li>• <u>Student Psychomotor Skill Status Review*</u></li> </ul>	<b><u>Holiday Party</u></b> <u>A = Whole-Part-Whole</u> <u>B = Transitional Learning</u> <u>C = Problem Based Learning</u> <u>D = Competency Testing</u> <u>*Each student advised of progress by Psychomotor Skills Coordinator</u>

<b><u>Monday</u></b> <b><u>12/8/14</u></b>	<u>Day Off- No Classes Reading Day</u>	
<b><u>12/9/14-</u></b> <b><u>12/15/14</u></b>	<u>Final examination (Exact Day TBD)</u>	<b><u>FA14 FINAL EXAM; Chapters 1, 2, 3, 7, 8, 10,</u></b> <b><u>11, 12, 13, 14, 15, 16</u></b>