

# **Mississippi Bureau of Emergency Medical Services**



**In Collaboration with:**

**National Registry of Emergency Medical Technicians**

**National Continued Competency Program (NCCP)**

**(NREMT Recertification Requirements)**

## **Local Continued Competency Requirements**

**(LCCR)**

### **Education Guide**

## OVERVIEW OF THE NATIONAL CONTINUED COMPETENCY PROGRAM

The National Continued Competency Program has three overarching requirements:

1. NATIONAL Continued Competency Requirements (NCCR)
2. LOCAL Continued Competency Requirements (LCCR)
3. INDIVIDUAL Continued Competency Requirements (ICCR)



The required hours of education vary at each level of National EMS Certification level based upon the complexity of maintenance of continued competency, the invasiveness of the care provided, and the depth and breadth of the knowledge base.

The following table lists the required number of hours of continuing education for each level of National EMS Certification and the respective allowable Distributive Education (Table 1). Each overarching requirement is explained in detail in the following sections.

**Table 1. NCCP Hour Requirements\***

	<b>National Requirements</b>	<b>Local Requirements</b>	<b>Individual Requirements</b>	<b>Total Hours</b>
<b>NREMR</b>	8 (up to 3 DE)	4 (up to 3 DE)	4 (up to 4 DE)	<b>16</b>
<b>NREMT</b>	20 (up to 7 DE)	10 (up to 7 DE)	10 (up to 10 DE)	<b>40</b>
<b>NRAEMT</b>	25 (up to 8 DE)	12.5 (up to 8 DE)	12.5 (up to 12.5 DE)	<b>50</b>
<b>NRP</b>	30 (up to 10 DE)	15 (up to 10 DE)	15 (up to 15 DE)	<b>60</b>

\*Total Distributive Education (DE) allowance: NREMR 10 hours; NREMT 24 hours; NRAEMT 28.5 hours; NRP 35 hours

### NATIONAL Continued Competency Requirements

The National Continued Competency Requirements (NCCR) replace the material currently taught in the traditional DOT refresher and represent 50% of the overall requirements necessary to renew National EMS Certification. Topics included in the National Continued Competency Requirements are updated every four years based upon input obtained from national EMS stakeholders. Topics chosen are informed by:

- Evidenced-based medicine
- Any changes in the National EMS Scope of Practice Model
- Science-based position papers that affect EMS patient care
- Patient care tasks that have low frequency yet high criticality
- Peer-reviewed articles that improve knowledge to deliver patient care

Topics identified are then approved for inclusion into the National Continued Competency Program by the NREMT Board of Directors Continued Competency Committee. Further, every four years the NREMT will provide the educational materials (i.e., lesson plans) for the NCCR component to the EMS community. An overview of the current NCCR may be found in Appendix A.

Registrants may use a course only once toward the total number of hours required in each topic. Individuals may complete up to 1/3 of the NCCR as Distributive Education (DE; i.e., CECBEMS

Designation F3\*\*, video review, directed studies, etc.). The maximum number of DE hours allowed for each level of certification for the national component can be found in **Table 2**. The total number of DE hours allowed for the NCCR will be decided by the NREMT's Continued Competency Committee and will be published with each change to the component topics.

<b>Table 2. Maximum Number of DE Allowed for the NCCR</b>	
	<b>NCCR Maximum Allowable DE</b>
<b>NREMR</b>	3 hours
<b>NREMT</b>	7 hours
<b>NRAEMT</b>	8 hours
<b>NRP</b>	10 hours

*\*\*NOTE: CECBEMS uses the F3 designation for distributive education. Other CECBEMS designations F1 (one-time events), F2 (multiple-event activities), and F5 (Virtual Instructor Led Training-VILT) are not classified as distributive education.*

### **LOCAL Continued Competency Requirements**

Local Continued Competency Requirements are developed and delivered at the local EMS level. LCCR represents 25% of the necessary requirements for all provider levels. The LCCR topics are chosen by state and local authorities. These topics may include changes in local protocols, tasks which require remediation based upon a quality assurance system, and/or topics noted to be of importance based upon run data reported to the National EMS Information Systems from the local level. These topics are locally chosen and will likely be different for every EMS system in the nation.

Implementation of local competencies can occur via a variety of methods. Meetings of local EMS system authorities such as the Operations Manager, Off Line Medical Director, Training Officers and other officials can occur where topics can be identified based upon known data regarding local care. Following these meetings, educational methodologies can be utilized to determine how and when to deliver education to all affected providers in an EMS system.

In areas such as Mississippi, protocols involving systems of care may have a state initiated component. When these are implemented education regarding changes can be used to meet the local competency requirements.

Below is an example of how one local EMS system implemented the local competency requirement:

1. A meeting of the Operations Manager, Off Line Medical Director, Training Officer and some EMS supervisors occurred.
2. Data regarding runs that were reviewed to improve local delivery of care was gathered and reviewed by these officers.
3. Data that was obtained based upon local EMS system runs over the past year was presented to these officers.
4. The Off Line Medical Director suggested changes in local protocols and/or suggested enhanced interventions within the state scope of practice.
5. EMS supervisors suggested topics based upon feedback they had received from EMS providers regarding their desires or weaknesses.
6. The committee reviewed all of the data and input and determines top priorities and corresponding topics to be placed in the upcoming years local competencies.

7. The Training Officer contacted local medical authorities who had expertise over the topic, requested the Medical Director to participate and/or assigned a willing supervisor to develop education delivery models based upon the identified topics.

During monthly in-services, topics were presented by either, the local Off Line Medical Director, supervisor, educator, Training Officer or subject matter expert.

A roster of who attended the lectures was maintained by the Training Officer who then entered the information on the NREMT website so that all who attended received credit for the hours toward meeting the local competency requirements.

**Mississippi Required Hours**

<b>Emergency Medical Technician</b>		<b>Paramedic</b>	
<b>Required: 10 hours</b>		<b>Required: 15 hours</b>	
<b>Documentation:</b> MEMSIS Reporting requirements, documentation (See LCCR Topic)	<b>2 hrs</b>	<b>Documentation:</b> MEMSIS Reporting requirements, documentation (See LCCR Topic)	<b>2 hrs</b>
<b>Hazardous Materials:</b> Use of Mandated Emergency Response Guide; HazMat Special Circumstances for EMS; CHEMPACK (See LCCR Topic)	<b>1 hrs</b>	<b>Hazardous Materials:</b> Use of Mandated Emergency Response Guide; HazMat Special Circumstances for EMS; CHEMPACK (See LCCR Topic)	<b>1 hrs</b>
<b>Performance Improvement and/or Data Quality</b> (Approved through BEMS)	<b>1 hrs</b>	<b>Performance Improvement and/or Data Quality</b> (Approved through BEMS)	<b>2 hrs</b>
<b>Spinal Precaution</b> (Approved through BEMS)	<b>1 hrs</b>	<b>Spinal Precaution</b> (Approved through BEMS)	<b>1 hrs</b>
<b>Training Officer and/or local Medical Director Topic based on regional needs.</b>	<b>5 hrs</b>	<b>Training Officer and/or local Medical Director Topic based on regional needs.</b>	<b>9 hrs</b>

Mechanisms that can be used to choose local topics include, but are not limited to:

- Changes in local protocols
- Tasks that require remediation based upon a quality assurance system
- National EMS Information Systems (NEMSIS)

Individuals may complete up to 2/3 of the LCCR as Distributive Education (DE; i.e., CECBEMS Designation F3\*\*, video review, directed studies, etc.) The maximum number of DE hours allowed for each level of certification for the local component can be found in **Table 3**.

	<b>LCCR Maximum Allowable DE</b>
<b>NREMR</b>	3 hours
<b>NREMT</b>	7 hours
<b>NRAEMT</b>	8 hours

<b>NRP</b>	10 hours
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**\*\*NOTE:** CECBEMS uses the F3 designation for distributive education. Other CECBEMS designations F1 (one-time events), F2 (multiple-event activities), and F5 (Virtual Instructor Led Training-VILT) are not classified as distributive education.

**Practice performance (skills) competency**

As with the traditional recertification model, verification of skill competence is required at the local level. Training Officers are responsible for the attestation of skill competency for NREMTs. Off Line Medical Directors are responsible for the attestation of skill competency for NRPs. A detailed description of the skills requiring verification of continued competence may be found in **Table 4**. The expectation of validation of this part of the local requirements is that the EMS professional has been verified as competent over every required skill and any necessary remediation has been undertaken.

Competency may be verified through any of the following methods:

- Quality assurance or quality improvement programs
- Direct observation of the skills being performed in an actual setting
- Other means of skill evaluation (practical testing, etc.)

**Table 4.** Required Continued Competency Skills for NREMTs and NRPs

<b>NREMT</b>	<b>NRP</b>
Patient Assessment/Management <input checked="" type="checkbox"/> Medical and trauma	Patient Assessment/Management <input checked="" type="checkbox"/> Medical and trauma
Ventilatory Management Skills/Knowledge <input checked="" type="checkbox"/> Simple adjuncts <input checked="" type="checkbox"/> Supplemental oxygen delivery <input checked="" type="checkbox"/> Bag-valve-mask <input type="checkbox"/> One-rescuer <input type="checkbox"/> Two-rescuer	Ventilatory Management Skills/Knowledge <input checked="" type="checkbox"/> Simple adjuncts <input checked="" type="checkbox"/> Supplemental oxygen delivery <input checked="" type="checkbox"/> Supraglottic airways (PTL, Combitube, King LT) <input checked="" type="checkbox"/> Endotracheal intubation <input checked="" type="checkbox"/> Chest decompression <input checked="" type="checkbox"/> Transtracheal Jet Ventilation/Cricothyrotomy
Cardiac Arrest Management <input checked="" type="checkbox"/> Automatic External Defibrillator (AED)	Cardiac Arrest Management <input checked="" type="checkbox"/> Megacode & ECG recognition <input checked="" type="checkbox"/> Therapeutic modalities
Hemorrhage Control & Splinting Procedures Spinal Immobilization <input checked="" type="checkbox"/> Seated and lying patients	<input checked="" type="checkbox"/> Monitor/defibrillator knowledge (setup, routine maintenance, pacing)
OB/Gynecologic Skills/Knowledge Other Related Skills/Knowledge <input checked="" type="checkbox"/> Radio communications <input checked="" type="checkbox"/> Report writing and documentation	Hemorrhage Control & Splinting Procedures IV Therapy & IO Therapy <input checked="" type="checkbox"/> Medication administration
	Spinal Immobilization <input checked="" type="checkbox"/> Seated and lying patients

	OB/Gynecologic Skills/Knowledge Other Related Skills/Knowledge <input type="checkbox"/> Radio communications <input type="checkbox"/> Report writing and documentation
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### INDIVIDUAL Continued Competency Requirements

The Individual Continued Competency Requirements (ICCR) represent 25% of the required continuing education. To satisfy these requirements, an individual may select any EMS-related education.

There are no limitations on the number of hours in a specific topic, however, an individual may not use the same course more than once in a registration cycle. Individuals may complete all of the ICCR as Distributive Education (DE; i.e., CECBEMS Designation F3\*\*, video review, directed studies, etc.). The maximum number of DE hours allowed for each level of certification for the individual component can be found in **Table 5**.

**Table 5.** Maximum Number of DE Allowed for the ICCR

	ICCR Maximum Allowable DE
<b>NREMR</b>	4 hours
<b>NREMT</b>	10 hours
<b>NRAEMT</b>	12.5 hours
<b>NRP</b>	15 hours

**\*\*NOTE:** CECBEMS uses the F3 designation for distributive education. Other CECBEMS designations F1 (one-time events), F2 (multiple-event activities), and F5 (Virtual Instructor Led Training-VILT) do are not classified as distributive education.

### Recertification

To recertify with the NCCP Method, there are two options:

- 1. Recertification by Examination:** The recertification by examination option enables you to demonstrate continued cognitive competence without requiring you to document continuing education. This option is available during the last six months of your recertification cycle.
- 2. Continuing Education Method:** The continuing education option allows you to demonstrate continued cognitive competency by documenting the hours of continuing education you completed during your certification cycle. The NREMT online recertification process to may be used to track your continuing education hours, affiliate with your agency and submit your application online for faster processing.

The following are maximum hours per course that can be applied towards the new National Continued Competency Program (NCCR, LCCR and ICCR):

- Hour-for-hour credit can be applied for standardized courses (including, but not limited to, ABLS, ACLS, AMLS, EMPACT, EPC, ITLS, PHTLS, PALS, PEPP, etc.)
- Credit can be applied for college courses that relate to your role as an EMS professional (1 college credit = 8 hours of continuing education). Examples include, but not limited to, anatomy, physiology, biology, chemistry, pharmacology, psychology, sociology, statistics, etc.
- Hours from the following courses can be applied hour-for-hour with no maximum: Advanced Trauma Life Support, EMS Course Instruction, and Wilderness EMS Training.

The following **cannot** be applied towards the new National Continued Competency Program (NCCR, LCCR and ICCR):

- Performance of duty or volunteer time with agencies
- Clinical rotations
- Instructor methodology courses
- Management/leadership courses
- Preceptor hours
- Serving as a skills examiner

**NOTE:** *Course hours may be split between two or more topic areas of the NCCR or between components (NCCR, LCCR and ICCR). Registrants may use a course only once toward the total number of hours required in the NCCR. Local (LCCR) hours are defined by the Medical Director/Training Officer, the State, or both. There are no limitations on the number of hours in a specific topic area for the ICCR, however, registrants may not use the same course more than once in a registration cycle.*

Excess hours from a course can be carried over to another requirement area. For example, if an eight hour class meets the requirements for use in 6 hours of the NCCR the remaining 2 hours can be used to satisfy hour requirements of the LCCR or ICCR.

## **ACCEPTABLE CONTINUING EDUCATION METHODOLOGIES**

### ***APPROVAL OF CONTINUING EDUCATION (CE)***

The National Registry of Emergency Medical Technicians does not approve or endorse initial or continuing EMS Education.

The Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS) and state EMS offices approve and accredit continuing education offerings.

### ***CONTINUING EDUCATION***

Continuing Education may occur at the EMS system level with multiple EMS providers present or by individuals seeking to meet the recertification requirements. This guide includes types of education individuals or systems may use to deliver the education requirements.

When an EMS system hosts education for groups of EMS providers, multiple provider levels may receive the education. Education does not have to be offered separately at each level. When groups of different levels of providers are present, the Training Officer may structure the course so that fundamental information is offered to all providers and then advanced level information regarding interventions can be offered to advanced providers toward the end of the educational offering as an example. When topics are unique to a level only those providers need to be present.

Individuals seeking to meet the requirements may do so via offerings within their EMS systems or via other methods. Other methods may include:

- Structured Continuing Education
- Formal Training Programs
- Conferences and Symposia
- Globally Recognized Continuing Education Courses (such as ACLS, PHTLS, ITLS, etc.)
- Distributive Education (NCCR=no more than 1/3; LCCR=no more than 2/3; ICCR=unlimited)
- Case Reviews
- Grand Rounds
- Directed Studies
- Teaching

An explanation of acceptable education methodologies can be found in the *National Continued Competency Program: Training Officer Guide*.

NREMT – National Component	20 Hours
<b>Airway, Respiration &amp; Ventilation</b>	
Ventilation <ul style="list-style-type: none"> <li><input type="checkbox"/> Minute ventilation</li> <li><input type="checkbox"/> Effect on cardiac output</li> <li><input type="checkbox"/> Assisted Ventilation               <ul style="list-style-type: none"> <li>○ Respiratory failure versus distress</li> <li>○ Adjuncts                   <ul style="list-style-type: none"> <li>▪ Automatic Transport Ventilator</li> </ul> </li> <li>○ Positioning</li> </ul> </li> </ul>	[3 hours]
Oxygenation	[1 hour]
	<b>4 total hours Airway, Respiration and Ventilation</b>
<b>Cardiovascular</b>	

NREMT – National Component	20 Hours
Post-Resuscitation Care <ul style="list-style-type: none"> <li><input type="checkbox"/> Recognition of Return of Spontaneous Circulation (ROSC)</li> <li><input type="checkbox"/> Oxygenation</li> <li><input type="checkbox"/> Induced hypothermia (only limited depth and breadth)</li> </ul>	[0.5 hours]
Stroke <ul style="list-style-type: none"> <li><input type="checkbox"/> Assessment (stroke scale)</li> <li><input type="checkbox"/> Oxygen administration</li> <li><input type="checkbox"/> Time of onset (duration)</li> <li><input type="checkbox"/> Transport destination</li> </ul>	[1 hour]
Cardiac Arrest & Ventricular Assist Devices	[0.5 hours]
Cardiac Rate Disturbance (Pediatric) <ul style="list-style-type: none"> <li><input type="checkbox"/> Tachycardia</li> <li><input type="checkbox"/> Bradycardia</li> <li><input type="checkbox"/> Irregular pulse</li> </ul>	[1 hour]
Pediatric Cardiac Arrest <ul style="list-style-type: none"> <li><input type="checkbox"/> Optimal chest compressions               <ul style="list-style-type: none"> <li>o Techniques</li> </ul> </li> <li><input type="checkbox"/> Ventilation/Compression ratio               <ul style="list-style-type: none"> <li>o <i>Single and 2-Rescuer CPR</i></li> <li>o AED use</li> </ul> </li> </ul>	[2 hours]
Chest Pain from Cardiovascular Cause (Adult) <ul style="list-style-type: none"> <li><input type="checkbox"/> Medication administration               <ul style="list-style-type: none"> <li>o Nitroglycerin</li> <li>o Aspirin (ASA)</li> <li>o Oxygen</li> </ul> </li> <li><input type="checkbox"/> Transportation destination</li> </ul>	[1 hour]
	<b>6 total hours Cardiovascular</b>
<b>Trauma</b>	
CNS Injury <ul style="list-style-type: none"> <li><input type="checkbox"/> Concussion</li> </ul>	[0.5 hours]
Tourniquets	[0.5 hours]
Field Triage <ul style="list-style-type: none"> <li><input type="checkbox"/> Model Uniform Core Criteria (MUCC)</li> <li><input type="checkbox"/> CDC Trauma Triage Decision Scheme</li> <li><input type="checkbox"/> Sort, Assess, Lifesaving Interventions, Treatment/Transport (SALT)</li> </ul>	[1 hour]
	<b>2 total hours Trauma</b>

NREMT – National Component	20 Hours
<b>Medical</b>	
Special Healthcare Needs <ul style="list-style-type: none"> <li><input type="checkbox"/> Tracheostomy care</li> <li><input type="checkbox"/> Dialysis shunts</li> <li><input type="checkbox"/> How to deal with patient and equipment               <ul style="list-style-type: none"> <li><input type="checkbox"/> Feeding tubes, VP shunts, etc.</li> </ul> </li> <li><input type="checkbox"/> Cognitive issues</li> </ul>	[1 hour]
OB Emergency <ul style="list-style-type: none"> <li><input type="checkbox"/> Abnormal presentations               <ul style="list-style-type: none"> <li><input type="checkbox"/> Nuchal cord</li> </ul> </li> <li><input type="checkbox"/> Neonatal resuscitation               <ul style="list-style-type: none"> <li><input type="checkbox"/> Routine suctioning of the neonate</li> </ul> </li> </ul>	[1 hour]
Psychiatric Emergencies <ul style="list-style-type: none"> <li><input type="checkbox"/> Mental health</li> <li><input type="checkbox"/> Patient restraint               <ul style="list-style-type: none"> <li><input type="checkbox"/> Agitated delirium (only limited depth and breadth)</li> </ul> </li> <li><input type="checkbox"/> Suicide/Depression</li> </ul>	[1.5 hours]
Endocrine <ul style="list-style-type: none"> <li><input type="checkbox"/> Diabetes</li> <li><input type="checkbox"/> Metabolic Syndrome (only limited depth and breadth)               <ul style="list-style-type: none"> <li><input type="checkbox"/> Insulin resistance, DKA/HHNS</li> </ul> </li> <li><input type="checkbox"/> Medication pumps (only limited depth and breadth)               <ul style="list-style-type: none"> <li><input type="checkbox"/> Insulin</li> </ul> </li> <li><input type="checkbox"/> Glucometer (only limited depth and breadth)</li> </ul>	[1 hour]
Immunological Diseases <ul style="list-style-type: none"> <li><input type="checkbox"/> Allergic reaction</li> <li><input type="checkbox"/> <input checked="" type="checkbox"/> Anaphylaxis</li> </ul>	[1 hour]
Communicable Diseases <ul style="list-style-type: none"> <li><input type="checkbox"/> Hygiene (hand washing, etc.)</li> <li><input type="checkbox"/> Vaccines</li> <li><input type="checkbox"/> Antibiotic resistant infections</li> <li><input type="checkbox"/> Influenza</li> <li><input type="checkbox"/> <i>Public health – epidemics, pandemics, reporting, etc.</i></li> <li><input type="checkbox"/> <i>Systematic inflammatory response syndrome (SIRS) versus sepsis versus septic shock</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> Fluid resuscitation</li> </ul> </li> </ul>	[0.5 hours]

NREMT – National Component	20 Hours
	<b>6 total hours Medical</b>
<b>Operations</b>	
At-Risk Populations <ul style="list-style-type: none"> <li><input type="checkbox"/> Pediatric</li> <li><input type="checkbox"/> Geriatric</li> <li><input type="checkbox"/> Economically disadvantaged</li> <li><input type="checkbox"/> Domestic violence</li> <li><input type="checkbox"/> Human trafficking</li> </ul>	[0.5 hours]
Pediatric Transport	[0.5 hours]
Affective Characteristics <ul style="list-style-type: none"> <li><input type="checkbox"/> Professionalism</li> <li><input type="checkbox"/> Cultural competency <ul style="list-style-type: none"> <li>○ Changing demographics</li> </ul> </li> </ul>	[0.5 hours]
Role of Research	[0.5 hours]
	<b>2 total hours Operations</b>

NRP – National Component	30 Hours
<b>Airway, Respiration &amp; Ventilation</b>	
Ventilation	[2 hours]
Capnography	[1 hour]
Advanced Airway Management in the Perfusing Patient	[1 hour]
	<b>4 total hours Airway, Resp &amp; Vent</b>
<b>Cardiovascular</b>	
Post-Resuscitation Care <ul style="list-style-type: none"> <li><input type="checkbox"/> Recognition of Return of Spontaneous Circulation</li> <li><input type="checkbox"/> Oxygenation</li> <li><input type="checkbox"/> Induced hypothermia (only limited depth and breadth)</li> </ul>	[2 hours]
Ventricular Assist Devices	[0.5 hours]
Stroke <ul style="list-style-type: none"> <li><input type="checkbox"/> Assessment</li> <li><input type="checkbox"/> Oxygen administration</li> <li><input type="checkbox"/> Time of onset (duration)</li> <li><input type="checkbox"/> Transport destination</li> <li><input type="checkbox"/> Fibrinolytics check sheet</li> </ul>	[1.5 hours]

NRP – National Component	30 Hours
Cardiac Arrest <ul style="list-style-type: none"> <li><input type="checkbox"/> Chain of survival</li> <li><input type="checkbox"/> Optimal chest compressions               <ul style="list-style-type: none"> <li>o Depth, rate, recoil &amp; pause</li> </ul> </li> <li><input type="checkbox"/> Airway issues in cardiac arrest               <ul style="list-style-type: none"> <li>o Halting CPR to intubate</li> <li>o Hyperventilation</li> <li>o Supraglottic vs ETT vs BVM</li> </ul> </li> <li><input type="checkbox"/> Termination decision criteria               <ul style="list-style-type: none"> <li>o NAEMSP/AHA Position</li> </ul> </li> <li><input type="checkbox"/> ETCO<sub>2</sub> changes during arrest and ROSC</li> </ul>	[2 hours]
Congestive Heart Failure <ul style="list-style-type: none"> <li><input type="checkbox"/> Recognition</li> <li><input type="checkbox"/> Treatment</li> </ul>	[0.5 hours]
Pediatric Cardiac Arrest <ul style="list-style-type: none"> <li><input type="checkbox"/> Optimal chest compressions               <ul style="list-style-type: none"> <li>o Techniques</li> </ul> </li> <li><input type="checkbox"/> Ventilation/Compression ratio               <ul style="list-style-type: none"> <li>o Single and 2-Rescuer</li> </ul> </li> <li><input type="checkbox"/> ALS Management</li> <li><input type="checkbox"/> Unique causes of pediatric cardiac arrest (only limited depth and breadth)               <ul style="list-style-type: none"> <li>o HOCM</li> <li>o <i>Commotio cordis</i></li> <li>o Long QT</li> <li>o AHA Channelopathy</li> </ul> </li> </ul>	[2.5 hours]
ACS <ul style="list-style-type: none"> <li><input type="checkbox"/> 12 Lead Review</li> <li><input type="checkbox"/> STEMI imposters</li> </ul>	[1 hour]
	<b>10 total Hours Cardiovascular</b>
<b>Trauma</b>	
CNS Injury <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Concussion</li> <li><input checked="" type="checkbox"/> ETCO<sub>2</sub> monitoring</li> </ul>	[2 hours]
Tourniquets	[0.5 hours]
Field Triage <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Model Uniform Core Criteria (MUCC)</li> <li><input checked="" type="checkbox"/> CDC Trauma Triage Decision Scheme</li> <li><input checked="" type="checkbox"/> Sort, Assess, Lifesaving Interventions, Treatment/Transport (SALT)</li> </ul>	[1 hour]
Fluid Resuscitation <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Physiology</li> <li><input checked="" type="checkbox"/> <i>Effects of over-loading</i></li> </ul>	[0.5 hours]

NRP – National Component	30 Hours
	<b>4 total hours Trauma</b>
<b>Medical</b>	
Special Healthcare Needs <ul style="list-style-type: none"> <li><input type="checkbox"/> Tracheostomy care</li> <li><input type="checkbox"/> Dialysis shunts</li> <li><input type="checkbox"/> How to deal with patient and equipment               <ul style="list-style-type: none"> <li>○ Feeding tubes, CSF shunts, etc.</li> </ul> </li> <li><input type="checkbox"/> Cognitive issues</li> </ul>	[2 hours]
OB Emergency <ul style="list-style-type: none"> <li><input type="checkbox"/> Abnormal presentation               <ul style="list-style-type: none"> <li>○ Nuchal cord</li> </ul> </li> <li><input type="checkbox"/> Neonatal resuscitation               <ul style="list-style-type: none"> <li>○ Routine suctioning of the neonate</li> </ul> </li> </ul>	[1 hour]
Communicable Diseases <ul style="list-style-type: none"> <li><input type="checkbox"/> Hygiene (hand washing, etc.)</li> <li><input type="checkbox"/> Vaccines</li> <li><input type="checkbox"/> Antibiotic resistant infections</li> <li><input type="checkbox"/> Influenza</li> <li><input type="checkbox"/> Public health – epidemics, pandemics, reporting, etc.</li> <li><input type="checkbox"/> SIRS versus sepsis versus septic shock               <ul style="list-style-type: none"> <li>○ Fluid resuscitation</li> </ul> </li> <li><input type="checkbox"/> Appropriate precautions</li> </ul>	[1 hour]
Medication Delivery <ul style="list-style-type: none"> <li><input type="checkbox"/> IM vs SC (e.g., epi)               <ul style="list-style-type: none"> <li>○ Atomized/Nasal</li> </ul> </li> </ul>	[1 hour]
Pain Management <ul style="list-style-type: none"> <li><input type="checkbox"/> NAEMSP recommendations</li> <li><input type="checkbox"/> <input checked="" type="checkbox"/> AAP pediatric pain management</li> </ul>	[1 hour]
Psychiatric Emergencies <ul style="list-style-type: none"> <li><input type="checkbox"/> Mental health</li> <li><input type="checkbox"/> Patient restraint               <ul style="list-style-type: none"> <li>○ Agitated delirium (only limited depth and breadth)</li> </ul> </li> <li><input type="checkbox"/> Suicide/Depression</li> </ul>	[1 hour]
<b>Operations</b>	
At-Risk Populations <ul style="list-style-type: none"> <li><input type="checkbox"/> Pediatric</li> <li><input type="checkbox"/> Geriatric</li> <li><input type="checkbox"/> Economically disadvantaged</li> <li><input type="checkbox"/> Domestic violence</li> <li><input type="checkbox"/> Human Trafficking</li> </ul>	[1 hour]

<b>NRP – National Component</b>	<b>30 Hours</b>
Pediatric Transport	[0.5 hours]
Culture of Safety <ul style="list-style-type: none"> <li><input type="checkbox"/> Adverse event reporting</li> <li><input type="checkbox"/> Medication safety</li> </ul>	[0.5 hours]
Affective Characteristics <ul style="list-style-type: none"> <li><input type="checkbox"/> Professionalism</li> <li><input type="checkbox"/> Cultural competency               <ul style="list-style-type: none"> <li>○ Changing demographics</li> </ul> </li> </ul>	[1 hour]
Crew Resource Management	[1 hour]
Role of Research	[1 hour]
	<b>5 total hours Operations</b>