Study Guide for the NCEE Credentialing Examination

The following objectives were used to create the NCEE written examination. Utilizing these during your study journey will increase your ability to correctly answer questions on the examination. As the examination is intended to credential those candidates who have reached a mastery level of material comprehension, you should target your study efforts towards the higher levels of Bloom’s Taxonomy.

At the completion of this study document, the instructor-candidate should be able to:

Roles & Responsibilities of the EMS Instructor:

- Compare the differences between a Primary and Secondary Instructor.
- Describe the duties of a Primary Instructor, providing most of the instruction, during the entirety of an EMS course.
- Describe the duties of a Secondary Instructor assisting a Primary Instructor.
- Describe the importance of professional development through continuing education, conference offerings and formal academic coursework for the EMS instructor.
- Describe sources for locating relevant educational and research materials.
- Compare the relationship between the instructor and the student, assistant instructor, program director and medical director.
- Discuss the role of the course syllabus and lesson plan in course management.
- Recite the major components of the syllabus and lesson plan.
- Defend the importance of continuing professional development for the professional educator.
- Summarize the role of the instructor in the EMS classroom.
- Assess personal attitudes and demeanor that may distract from professionalism.
- Value the variety of the classroom culture.
- Appreciate the importance of the teacher-student relationship.
- Defend the need to provide fair, timely and constructive feedback to students.
- Evaluate professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork, diplomacy, and respect.
- Explain the value of serving as a mentor.
- Relate the importance of mentoring in the development of a professional EMS instructor.
- Identify resources at the federal level for obtaining information on policies and procedures for EMS education programs and courses.
- Identify resources at the state level for obtaining information on policies and procedures for EMS education programs and courses.
- Identify resources at the local level for obtaining information on policies and procedures for EMS education programs and courses.
Administration

- Identify resources at the federal level for obtaining information on policies and procedures for EMS education programs and courses.
- Identify resources at the state level for obtaining information on policies and procedures for EMS education programs and courses.
- Identify resources at the local level for obtaining information on policies and procedures for EMS education programs and courses.
- Describe the importance of understanding the policies and procedures put in place for EMS instructors for conducting EMS education programs and courses.

Legal Issues in EMS Education

- Define liability, negligence, and the standard of instruction.
- Identify areas of legal liability for the instructor and the educational institution.
- Identify risk management considerations for the student, instructor, and educational institution.
- Explain the importance of confidentiality.
- Identify applicable federal, state, and local laws which affect the EMS teaching profession and the educational institution.
- Explain legal considerations regarding copyright and intellectual property issues.
- Compare and contrast the Copyright Act of 1907 and the Digital Millennium Copyright Act of 1998.
- Discuss the importance of adhering to local, state, and federal laws governing the teaching profession and the conduction of EMS education programs.

Ethics

- Define ethics and morals.
- Identify and define the six moral theories described in the 2002 Guidelines for EMS Instructors.
- Describe one strength and one weakness for each of the six moral theories.
- Identify sources of ethical mission statements for educational and emergency medical organizations.
- Describe attributes of an ethical instructor.
- List venues in education that should have ethical role models.
- Describe ways in which ethics can be incorporated into the EMS curricula.
- Defend the need to model ethical behavior as instructors.

The Learning Environment

- Review the importance of a positive learning environment.
- List desirable behaviors for students in your classroom setting.
- Identify unacceptable student behaviors.
- Describe methods to engage students in the learning process through a positive learning environment.
- Create a positive learning environment, given a group of students in a classroom setting.
- Select effective methods of engaging students in the learning process as described by the 2002 Instructor Guidelines.
- Discuss the importance of a positive learning environment and the overall impact that has on the success of a class.
Learning Styles

- Define and describe "learning style" versus "learning preference".
- List common learning styles found in adult learners.
- Identify the following characteristics for each learning style:
  - Student needs, desires and preferences in instruction
  - Strengths and weaknesses inherent in that style
- Relate learning styles impact classroom dynamics.
- Describe activities that may be used to target a specific learning style.
- Identify surveys and other tools used to classify learning styles.
- Describe how your own learning style will affect instruction.
- Appraise the diversity found in the various learning styles.
- Identify types of learning styles assessments commonly used in EMS education.
- Given a scenario, identify a variety of teaching styles that reach all learning styles.

Domains of Learning

- Describe cognitive, psychomotor and affective domains of learning.
- Identify the levels of depth for each domain of learning.
- Given a scenario, identify the learning domain and level of depth of that domain.
- Identify the domain of learning and level of depth for a correctly written objective.
- Classify examples of behaviors that exemplify the three domains of learning.
- Within the context of an EMS call, identify knowledge and behavioral examples for cognitive, psychomotor and affective domains.
- List classroom activities for each domain of learning.
- Choose at least one appropriate evaluation method for each domain of learning.

Goals and Objectives

- Define and describe goal, objective and performance agreement.
- Identify and describe the ABCD parts of an objective.
- Describe each of the three domains of learning: cognitive, affective and psychomotor.
- Evaluate a planned learning activity (lecture, demonstration, etc.) to determine if there is performance agreement between the planned learning event and the course goals and objectives.
- Determine the level (1-3) from the language of an objective based on ABCD elements.
- Given an objective, identify the A, B, C, and D components.
- Given an incomplete objective (lacking 1 or 2 of the ABCD components), evaluate which elements are missing.
- Explain why goals and objectives are important to well-designed learning.
- Explain how the evaluation of goals and objective for performance agreement enhances quality.
- Explain why understanding the three levels within each domain are important in planning and executing instruction.

Lesson Plan

- Define a lesson plan.
- Define and describe the following components of a lesson plan:
  - Needs assessment
  - Overall goal of instruction
- Cognitive objectives
- Psychomotor objectives
- Affective objectives
- Lesson motivation
- Recommended list of equipment and supplies
- Recommended schedule
- List and describe the components of a needs assessment used for preparing a lesson plan.
- List and describe the items to consider when evaluating the intended audience during a needs assessment.
- Discuss the methods for determining the depth to which the content will be covered in a prepared lesson plan.
- Describe the process of aligning objectives of the curriculum with the specific objectives of the lesson plan.
- Discuss how to use a lesson plan to present course content.
- Describe the following methods to evaluate the effectiveness of lesson plans:
  - Formative evaluation strategies
  - Summative evaluation strategies
  - Written testing instruments
  - Practical skills demonstrations
- Support the use of lesson plans in guiding the planning and presentation of instruction.
- Defend the need to perform a complete and thorough needs assessment prior to the development of a lesson plan.
- Identify the pros and cons of common written evaluation tools.

**Presentation Skills**

- Distinguish four different instructional styles.
- Describe the proper use of instructor presence in the classroom setting.
- List types of media available for classroom use.
- List criteria for successful classroom presentations.
- List strategies that can be used to augment classroom presentations.
- Identify the use, pros and cons of each of the following methods:
  - lecture
  - student centered activity like a role-playing scenario, simulation or game
- Discuss how to gauge students’ response to your presentation.
- Explain how different classroom presentation strategies enhance learning.
- Describe the importance of including varying learning styles in each lesson plan.
- Value the importance of diversity in the types of media used to deliver subject matter.

**Evaluation Techniques**

- Define evaluation, formative evaluation and summative evaluation.
- Distinguish between formal and informal evaluation.
- Identify various types of evaluation, and the advantages and disadvantages of each.
- Identify specific types of test items, and the advantages and disadvantages of each.
- Understand general guidelines for test construction.
- Define reliability.
- Define content validity.
• List examination resources.
• Identify examples of correctly constructed test items for cognitive evaluation in each of the following categories:
  ▪ Multiple choice
  ▪ True/false
  ▪ Matching
  ▪ Completion
  ▪ Essay
• Describe how to evaluate a psychomotor skills performance.
• Explain why evaluation is important to the total quality control of an EMS program.
• Explain why formative and summative evaluations are both important in the evaluation process.

### Facilitation Techniques

• Describe facilitated learning.
• Describe why motivating students is an important factor in an environment that promotes facilitated learning.
• Identify classroom arrangements and formats that promote and enhance facilitation techniques.
• Explain why the standard lecturing method does not provide a facilitated learning environment.
• List methods to enhance the lecture method to make it a more facilitated learning experience.
• Explain the role of group work in a facilitated learning environment.
• List tips or methods to facilitate a discussion in the classroom.
• List tips for facilitating a practical (psychomotor) classroom session.
• Describe methods to maintain classroom control when using a facilitated learning environment.
• Value the need for providing a facilitated learning environment for adult students.

### Communication and Feedback

• Describe the process of active listening.
• State the importance of timely feedback.
• Compare and contrast counseling and evaluation.
• Identify the steps to effective counseling sessions.
• Describe several unique types of questioning that could be used to solicit student responses.
• Explain how body language affects one’s verbal communication reception.
• Discuss the need to check for understanding when giving students information.
• State the benefits of honest communication in the education environment.
• Understand the use of the pause when questioning students in a role-play exercise in the classroom.
• Describe the proper use of positive and negative feedback in a counseling scenario.
• Discuss the use of questioning techniques to solicit student responses in the classroom environment.
• Describe body language that is recognized as open, interested and positive.
• Support the need for positive communication in the learning environment.
• Identify open communication in a classroom.
• Discuss the need for honesty in academic communications.
Motivation in Education

- Define intrinsic and extrinsic motivation.
- List intrinsic motivators of behavior.
- List extrinsic motivators of behavior
- Given a description of behavior, identify the motivator for that student's behavior.
- Describe techniques to increase motivation in different types of students.
- Identify techniques to increase self-motivation for instructors.
- Identify motivational factors for students in a given class.
- Describe behaviors that motivate students.
- Describe how to create a classroom environment that is motivating to students.
- Appreciate students have different motivations for participating in an EMS course and give examples of such.
- Value the need to rejuvenate motivation as an instructor.

Teaching Thinking Skills

- Differentiate between learning and knowing.
- List activities that foster thinking skills.
- Define high level thinking.
- Describe how “critical thinking” effects the practice of prehospital medicine.
- Describe the benefits of an active classroom or experiential learning.
- Discuss the importance in developing good judgement and thinking skills in students.
- Describe examples of activities that encourage high level thinking skills.
- Value the use of scenarios and simulations in the classroom.

Teaching Psychomotor Skills

- Define psychomotor skills.
- Explain the relationship between cognitive and affective objectives to psychomotor objectives.
- Describe teaching methods appropriate for learning a psychomotor skill.
- Describe classroom activities used to teach and practice psychomotor skills.
- List methods to enhance the experience of psychomotor skill practice in the classroom
- Describe proper facilitation technique when demonstrating EMS skills.
- Discuss the use of corrective feedback during a skill demonstration.
- Identify a skill session which maximizes student practice time.
- Discuss the importance of a skill scenario which enhances realism.
- Acknowledge the need to teach the mechanics of a skill before students can apply higher level thinking about the process.
- Value the need for students to practice until they attain mastery level.
- Discuss the importance of modeling excellence in skill performance.

Affective Domain

- Provide a definition of the affective domain of learning.
- Give examples of student behaviors that illustrate desired behaviors or changes in behavior in the affective domain.
- Within the context of EMS practice, identify examples of affective domain behaviors.
- List classroom activities that support development of the student's affective domain.
• Acknowledge & describe the need to teach to the affective domain
• Identify activities that teach and evaluate the affective domain.
• Describe the affective domain of performance for the EMS professional.

Remediation
• Define and describe remediation.
• Describe the steps of the remediation process.
• Describe the critical components to include when performing an assessment of a problem requiring remediation.
• List skills critical to student learning success.
• Identify and explore the causes of a problem requiring remediation.
• Discuss the need to assist student in becoming independent self-directed learners.

Cultural Awareness
• Define and describe cultural awareness.
• Understand various ethnic and religious values and traditions that may affect a student’s behavior.
• Explain the behaviors an EMS instructor can model to show awareness of cultural issues in the classroom.
• Describe aspects of cultural awareness that are important to instill in students in the classroom setting.
• Defend the need to consider cultural awareness issues when designing and developing instructional plans and curriculum.
• Identify behaviors that indicate consideration of cultural awareness issues when dealing with students.
• Discuss the importance of an instructor sharing their knowledge of cultural awareness by modeling culturally sensitive behaviors to your students in the classroom.

Teaching Resources
• Discuss the importance of mentors for the development of a professional EMS instructor.
• Discuss the importance of working with various allied health personnel, including State EMS agency personnel, area hospital personnel (ER physicians, nurses, respiratory therapists, pharmacists, etc.), non-hospital affiliated physicians and are a paramedic program faculty (e.g., college and university).
• Compare the importance of validity, utility and the effective use of resources in delivering content in a program.
• Relate the importance of attending professional development opportunities (e.g., EMS and education conferences and workshops).
• Discuss the usefulness of a library in developing educational content.
• Discuss the importance of research for each of the following:
  ▪ When developed for a specific organizational need
  ▪ Used when participating in larger multi-organizational projects
  ▪ As a contribution to the body of knowledge
• Discuss the importance of developing a support network with each of the following:
  ▪ local political officers (e.g., county council, mayor, city manager)
  ▪ physicians
• publishers
• area EMS instructors
• area paramedic program faculty (e.g., college and university)
• other faculty within your agency

• Discuss the importance of using community service as a means of developing teaching skills
  • through presentations to public groups (e.g., scouts, schools, civic groups)
  • assisting with area EMS courses

• Given a specific EMS instructional setting (with audience, teaching site, and course type provided) the student-instructor should be able to take specific EMS course content resources (provided to them) and evaluate that resource for validity, utility and effectiveness in the described setting.

• Use the resources described by the 2002 Instructor Guidelines to enhance lesson plan content
• Explain the importance of critical evaluation of teaching resources
• Value the importance of developing methods designed to enhance personal growth and life-long learning.

Research

• Describe the nature and characteristics of research as it relates to the practice of EMS
• Understand the common types and methods of conducting research.
• Distinguish between the different types of research commonly conducted in the EMS setting.
• Understand how research studies are designed and conducted.
• Describe methods used to read the research literature with understanding.
• Identify sources for locating relevant research materials and findings.
• Defend the importance of teaching research methods in the curriculum.
• Value the importance of research in the clinical and educational settings of EMS.
• Value the need to assist in the research process and data collection activities.
• Explain the value of research to the EMS provider and the EMS Educator.

Resource Documents


