MED 801

Immersion, Emergency Response & Population Health (EMT) Orientation (Late Summer)

Kirk Kerkorian School of Medicine at UNLV 1001 Shadow Lane Campus

COURSE DESCRIPTION AND LEARNING OBJECTIVES

The immersion course offers an orientation experience and all-inclusive introduction to University resources, School and University policies, and expectations of a Kirk Kerkorian School of Medicine at UNLV student. In addition, students are exposed to campus, educational program, and research opportunities, as well as emergency medical training with an opportunity to obtain a basic emergency medical technician (NREMT) certification. This course serves as the anchor for the longitudinal Nevada Community Service experiences that unfold throughout the four-year curriculum.

- Awareness and understanding of policies, procedures, and resources.
- Present a broad overview of the human body and its organ systems, all the while developing expertise and confidence with basic triage and management of emergency situations.
- Build competency for participation in basic emergency situations.
- Reflect upon and compare upstream and downstream factors in emergent medical situations.
- Assess the health status of populations utilizing public health surveillance data, vital statistics, registries and surveys.
- Use health care assessment tools to identify community risk and protective factors that impact individual and population health.
- Integrate epidemiologic, socioeconomic, behavioral, sociocultural and community factors into patient care.
- Begin to formulate clinical questions and apply evidence-based medicine to provide future, quality health care to individuals and populations.

REQUIRED AND RECOMMENDED TEXTBOOKS

Required

- Kuvlesky, E. B., & Story, C. N. (2014). Workbook for Prehospital Care, 10th edition. Pearson Publishing.
- Mistovich, J. J., & Karren, K. J. (2014). Prehospital Emergency Care, 10th edition. Howard A. Werman (Ed.). Pearson Publishing.
- King, T. E., Wheeler, M. B., Bindman, A. B., Fernandez, A., Grumbach, K., Schillinger, D., & Villela, T.J. (2016). Medical Management of Vulnerable and Underserved Patients: Principles, Practice, and Populations, 2nd edition. Available online via Access Medicine at: http://accessmedicine.mhmedical.com/book.aspx?bookid=1768

Recommended

To be determined at the onset and throughout the duration of the course to aid/facilitate learning objectives closely associated with weekly Population Health experiences and EMT.

COURSE SCHEDULE & WEEKLY OBJECTIVES

The first five (5) weeks of this course devotes Mondays to student orientation; including, but not limited to: setting-up access to ID cards and lockers, campus information, library resources and services, as well

as insight into various learning styles. Following the initial (joint) orientation to EMT Certification and Population Health components of the course, EMT training and certification sessions are scheduled four days per week along with one day of population health exposure.

Week 1 - Orientation & Introduction

Student Affairs

ID Cards, Parking, Security, Safety, Lockers & Equipment Overview (half-day)

EMT

Joint Introduction – EMT & Population Health (Upstream and Downstream factors) Workplace Health, Mask-fitting & CPR Documentation, Communication, Lift & Move, PPE, REM, Airway, vital signs and skill tests Review of Anatomy & Physiology and Medical Terminology

Topics include:

- Access and review of ID cards, parking enforcement, campus/clinical safety, lockers, and required equipment.
- Collective introduction to EMT/Population Health and expectations. How the knowledge of downstream medical techniques is used to triage and manage medical emergencies, which contribute to upstream factors in the community that cause or facilitate the development of such emergencies.
- Identify basic concepts of workplace health, mask-fitting, and cardiopulmonary resuscitation (CPR).
- Practice necessary documentation of EMT activities, terminology, and procedures for communication; i.e. lifting & moving, PPE, REM, Airway, vital signs, and various skills tests.
- Review of basic anatomy and physiology of major organ systems, as well as medical terminology used in emergency situations.

Population Health

Introduction to Community as Patient Small group meetings

Topics:

- Brief history and relevance of public health and medicine, esp. medical emergencies.
- Importance of population health and its role in professional education and practice
- Describe the core values and ethical pillars of public health.
- Effective medical or public health informatics questions and web search strategies.
- Retrieve statistical and non-statistical information and question its veracity.
- Identify community assets/tools purposed to maintain community health.
- Introduction to community engagement, its relevance, and teams for community health assessment project.

Assigned Readings & Review Materials for Week 1

- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 1-3, pgs. 1-55.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 4-6, pgs. 56-117.
- County Health Rankings and Roadmaps to Action retrievable at: http://www.countyhealthrankings.org/roadmaps/action-center
- The CDC Community Health Navigator at: http://www.cdc.gov/CHlnav/database
- Benjamin, G. C. (2015 May 19). Health Equity and Social Justice: A Health Improvement Tool. Grant Makers in Health. Retrievable at: https://www.gih.org/views-from-the-field/health-equity-and-social-justice-a-health-improvement-tool/

Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 7-8, pgs. 118-189. IN-CLASS QUIZ: Friday afternoon – Anatomy & Physiology IN-CLASS QUIZ: Monday afternoon – Pathophysiology

Week 2

Student Affairs

Review of the academic calendar and four-year curriculum (2.5 hours)

EMT

Lifespan, airway management, baseline vitals, history-taking, and Lift & Move skills Scene Size-up, Patient Assessment, and Medical Trauma Pharmacology, pharm cards, and pharm skills (lab)

Topics include:

- Review basic pathophysiology associated with emergency situations.
- Practice basic history-taking, vital sign skills, and basic airway management
- Perform patient medical histories and assessments, scene size-up, and evaluation of medical trauma situations.
- Assess and determine the pharmacological principles and medications utilized in medical trauma situations

Population Health

Social Determinants of Health and Windshield Field Survey

Topics:

- Understand Upstream and Downstream concepts that affect community health.
- Explain how living environments influence the health of individuals and communities.
- Use health indicators to identify population health problems and hypothesize possible risk/ protective factors.
- Identify community assets and stressors in high risk communities that affect health.
- Discuss the impact of socioeconomic status, environment, ethnicity and other population determinants on the health status of individuals and populations using the Socioecological Model of Health and Illness.

Assigned Readings & Review Materials for Week 2

- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 9-11, pgs. 190-292.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 12-13, pgs. 293-395.
- Braveman, P. & Gottlieb, L. (2014). Social Determinants of Health: It is time to Consider the Causes of the Causes. [Public Health Report]. Nursing in 3D: Diversity, Disparities, and Social Determinants, 129(2), pp. 19-31. Retrievable at: https://pubmed.ncbi.nlm.nih.gov/24385661/
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapter 14, pgs. 396-408.

Week 3

Student Affairs

Health Center, counseling and library resources (2.5 hours)

EMT

Shock, resuscitation, respiratory emergencies and skills lab Cardiovascular emergencies, altered mental status, stroke and headaches Seizures, acute diabetic emergencies, anaphylactic emergencies, and review session Toxicology, abdominal emergencies, environmental emergencies, and review session

Topics include:

- Recognize, evaluate, and manage cardiovascular and anaphylactic emergencies.
- Present, evaluate, and manage model patients presenting with altered mental states in lab session; e.g. stroke, headache, and seizures.
- Identify, evaluate, and manage acute diabetic emergencies.
- Develop an awareness of potential emergency situations involving exposure to or ingestion of toxic substances and environmental hazards.

Population Health

Key Informant Interview in the Field Obesity small group sessions

Topics:

- Key principles of community engagement and the importance of community partnerships.
- Identify population health problems and indicators, and hypothesize about possible risk/ protective factors.

Assigned Readings & Review Materials for Week 3

- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 15-16, pgs. 409-488.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 17-19, pgs. 489-560.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 20-21, pgs. 561-604.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 22-24, pgs. 605-712.
- MIDTERM EXAM Review

Week 4

Student Affairs

Study, learning, and time management skills (1.5 day)

FMT

Midterm Exam Submersion, behavioral emergencies, and scenarios Rewrite scenarios and review Obstetrics, care of newborns, pediatrics and geriatrics Trauma, bleeding, soft tissue injuries, burns, muscular skeletal trauma, and review.

Topics include:

- Identification and development of study, learning, and time management skills.
- Describe the physiology of submersion and drowning situations, and practice techniques to counteract the effects on respiratory function.
- Practice techniques to counteract the effects of suppressed respiratory function.
- Develop the awareness to readily identify and safely manage a variety of behavioral health emergency situations.
- Practice the basics of obstetrical and newborn emergency care.
- Recognize, evaluate, and stabilize both pediatric & geriatric patients' emergencies.

Population Health

Pediatrics & Geriatrics Small groups (Pedestrian case)

Topics:

- Delineate Healthy People Goals for 2020.
- Clarify the role and responsibility of future healthcare professionals in addressing health inequities among community populations.

Assigned Readings & Review Materials for Week 4:

- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 25-26, pgs. 713-749.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 37-38, pgs. 988-1089.
- Review the following articles:
 - 1. United Nations Road Safety Collaboration (2016)
 - 2. Pedestrian Safety: A Road Safety Manual for Decision Makers and Practitioners
 - 3. The WHO Manual. Retrievable at: http://www.who.int/roadsafety/projects/manuals/pedestrian/en/
 - 4. Smart Growth America (2014)
 - 5. Dangerous by Design: A National Epidemic of Pedestrian Deaths. Retrievable at: https://smartgrowthamerica.org/dangerous-by-design/
 - 6. Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 27-30 & 39, pgs. 750-861 & 1090-1116.

Week 5

Student Affairs

Financial Aid, Disabilities resources, careers in medicine (2.5 hours)

EMT

Head trauma, and the spinal column Abdominal trauma, genitourinary gastric system, multi-systemic issues, special cases, eye, face, neck, and chest trauma Ambulance and air med evacuation, gaining access skills, and review Special Challenges, combat veterans, and review session.

Topics include:

- Review of financial aid, disabilities resources, and careers in medicine.
- Develop the ability to evaluate and stabilize patients experiencing a variety of trauma situations, e.g. head and spinal cord, abdominal and multi-systemic trauma, chest, and eye, face and neck traumas.
- Build familiarity with basic ambulance and air-med evacuation operations.
- Identify Post Traumatic Stress Disorder (PTSD), and other syndromes common to combat veterans or those who have experience sever trauma, in emergency situations

Population Health

Presentation Preparation & Setup Presentation

Topics:

- Appraise the quality of evidence presented in peer-reviewed medical journals and other public health literature, and its implications at the patient & population levels.
- Reflect on best practices to maximize team effect in community engagement, the review and collection of data, and presentation of those findings.

Assigned Readings & Review Materials for Week 5

- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 33, 35 & 36, pgs. 924-944 & 965-987.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 31-32, pgs. 862-923.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapter 43, pgs. 1176-1195.
- Prehospital Emergency Care textbook (Mistovich & Karren): Chapters 41 & 44-46, pgs. 1145-1154
 & 1196-1248.

Week 6

EMT

Review for Final Exam National Registry Practice Exam & Written Exam Mock Tests and Review Session National Certification Testing & Written Exam

Topics include:

- Reflect upon six weeks of group/team experiences that included studying, evaluation, practice, review, and performing of EMT activities.
- Prepare for the Emergency Medical Technician National Certification Test.
- Schedule and commit to a minimum of two (2) EMT "ride along" experiences as a registered EMT three months following the completion of the course and passage on the National Registry Exam EMT National Certification Performance & Written Exam.

COURSE REQUIREMENTS & EVALUATION

Three (3) formative quizzes and a midterm are administered throughout the duration of the course, in addition to peer and EMT instructor evaluation of required physical maneuvers and exercises to assess weekly progress, identify content knowledge gaps, and procedural behaviors needing improvement. Active participation is an integral part of this course. Students must engage in individual, small group, class discussions, and EMT experiences in order to effectively contribute to all active learning activities; this includes offering and receiving constructive peer and professional feedback. Additionally, all students are expected to pass both parts of the National Registry Exam (exam & written portions), as well as participate in two (2) "ride-along" experiences. Additionally, performance assessments and formal, verbal assessments from EMT preceptors are administered throughout the course to gauge student development and progress. Students also receive verbal small group assessments during the Population Health component of this course.

Students are expected to arrive on time to all course sessions and prepared to participate actively and engage in all learning and small group activities. Additionally, students are expected to be respectful, take responsibility and accountability for their own choices, actions, and/or decision. This includes the demonstration of personal and professional integrity. Any student with a serious or multiple violations of professional behavior will be referred to the Medical Student Progress Committee (SPC) for review and potential action.

GRADING

A pass/fail (P/F) grade is based upon satisfactory participation in small group activities, EMT experiences, the timely completion of written assignments, reflections, and group exercises, including the successful passage of three formative in-class quizzes, a midterm examination, and passage on the basic EMT certification exam and written portion (Emergency Medical Technician National Certification Test), and per satisfactory end-of-course summative, narrative assessments from population health community mentors and EMT preceptors. Three (3) months following the completion of the course and passage on the EMT National Registry Exam, a minimum of two (2) EMT "ride along" experiences must be scheduled.

DRESS CODE

Students represent not only themselves, but also the medical profession to those with whom they have contact. Appropriate and professional attire should be worn, especially when students are in patient care settings or when contact with patients is anticipated. Students should be aware that personal appearance may serve to inspire or hinder the establishment of the trust and confidence that are essential in the doctor-patient relationship. Jeans, sandals, and shorts (and other casual attire) are not considered

professional dress. Scrubs are worn in the operating room, in the anatomy lab or in other clinical circumstances to protect the operator's clothing from soilage. Scrubs, in general, should not be worn outside of the lab or hospital, and scrubs worn in the operating room should not be worn outside of the operating room. (Please refer to the Professionalism section in the Student Handbook for guidelines pertaining specifically to dress and deportment.)

POLICIES

Academic Misconduct

Academic integrity is a legitimate concern for every member of the University community. We all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy, and are encouraged to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the source(s). See the Student Conduct Code, https://www.unlv.edu/studentconduct/student-conduct.

Auditing a Course

Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the primary purpose of assigning a grade.

Classroom Conduct

Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn, or of instructors to teach. Use of devices such as cellular phones and pagers, or other potentially disruptive activities are only permitted with the prior explicit consent of the instructor. Students are specifically prohibited to record classes without instructor authorization, including online/remote classes (either audio only, or video and audio). The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative withdrawal of the student from the course.

Since the COVID-19 pandemic forced some instruction to be delivered remotely starting in Spring 2020, numerous students have asked instructors to record their synchronous classes, so that they can access them at their convenience. Instructors who agree to record their classes (audio only, or video and audio) should inform students in advance. Recorded lectures may not be broadly released to anyone, but made available exclusively to those students enrolled in the class during the particular academic term. Recorded lectures must be stored securely, and are subject to the Nevada System of Higher Education's Records Retention Policy, meaning that the recordings can only be deleted 120 days after the end of class (i.e., after grades are posted). Once this requirement is met, the recordings should be deleted. Class recordings are protected from disclosure, as they are deemed part of an educational record under the Family Educational Rights and Privacy Act (FERPA).

Copyright

The University requires all members of the University Community to familiarize themselves with, and to follow copyright and fair use requirements. You are individually and solely responsible for violations of

copyright and fair use laws. The University will neither protect nor defend you, nor assume any responsibility for student or employee violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional copyright policy information is available at https://www.unlv.edu/provost/copyright.

Disability Resource Center (DRC)

The <u>UNLV Disability Resource Center</u> (Student Services Complex, SSC-A, Room 143, https://www.unlv.edu/drc, telephone 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to a permanent disability, temporary or permanent medical need, or academic support due to pregnancy are encouraged to contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what options may be available to you. Students who are already registered with the DRC should request their accommodations online each semester, and make an appointment to discuss their accommodations with their instructors.

Final Examinations

The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The Final Exam schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the Final Exam Schedule, https://www.unlv.edu/registrar/calendars.

Identity Verification in Online Courses

All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus-Canvas.

UNLV students enrolled in online or hybrid courses are expected to read and adhere to the Student Academic Misconduct Policy, https://www.unlv.edu/studentconduct/misconduct/policy, which states that "acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment" is a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute, and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy.

UNLV students enrolled in online courses are also expected to read and adhere to the <u>Acceptable Use of Computing and Information Technology Resources Policy</u>, https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy, which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus-Canvas or another UNLV-managed platform that requires ACE login credentials for access.

Incomplete Grades

The grade of "I" (Incomplete) may be granted when a student has satisfactorily completed three-fourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student's control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the period indicated, a grade of "F" will be recorded, and

the student's GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the "I" grade.

Library Resources

Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the Libraries' Research Consultation website,

https://guides.library.unlv.edu/appointments/librarian. You can also <u>ask the library staff</u> questions via chat and text message at https://ask.library.unlv.edu/.

Missed Classwork

Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Missed Classwork policy, under Registration Policies, on the <u>Academic Policies</u> webpage,

https://catalog.unlv.edu/content.php?catoid=32&navoid=8271&hl=.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student submits official written notification to the instructor no less than one week prior to the missed class(es).

The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities. Instructors should consider, for example, that in courses which offer a "Drop one" option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for extracurricular activity is both contrary to the intent of the Faculty Senate's policy, and an infringement on the student's right to complete all work for the course.

This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the University that could be reasonably avoided. There should be a good faith effort by both the instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/School Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to academic recruitment activities, competitive intercollegiate athletics, fine arts activities, liberal arts competitions, science and engineering competitions, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

Rebelmail

Rebelmail is UNLV's official email system for students and by University policy, instructors and staff should only send emails to students' Rebelmail accounts. Rebelmail is one of the primary ways in which students receive official University communications, information about deadlines, major Campus events,

and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Sending emails within WebCampus-Canvas is also acceptable.

Tutoring and Coaching

The Academic Success Center (ASC), at the Claude I. Howard Building, provides tutoring, academic success coaching, and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, please visit the ASC website, https://www.unlv.edu/asc, or call 702-895-3177. The ASC is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, https://writingcenter.unlv.edu/, located in the Central Desert Complex, Building 3, Room 301 (CDC 3-301). Walk-in consultations are sometimes available, but students with appointments receive priority assistance. Students may make appointments in person or by calling the Center, telephone 702-895-3908. Students are requested to bring to their appointments their Rebel ID Card, a copy of the instructions for their assignment, and two copies of any writing they have completed on their assignment.

Diversity Statement

As an institution of higher learning, UNLV represents a rich diversity of human beings among its faculty, staff, and students, and is committed to aspiring to maintain a Campus environment that values that diversity. Accordingly, the University supports understanding and appreciation of all members of its community, regardless of race, sex, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, gender, gender identity, marital status, pregnancy, genetic information, veteran status, or political affiliation. Please see University Statements and Compliance, https://www.unlv.edu/about/statements-compliance.

A successful learning experience requires mutual respect and trust between the students and the instructor. Accordingly, the instructor asks that students be willing to listen to one another's points of view, acknowledging that there may be disagreements, keep discussion and comments on topic, and use first person, positive language when expressing their perspectives.