

## MASH A BLAST FROM THE PAST TO COMBAT SHORTAGES

Presented by:  
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Partnership between LSUA & CLAHEC



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### MASH

**"Medical Application of Science for Health"**  
 Began in June 2016

- This program is available to students from 9 Louisiana parishes that CLAHEC serves: Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, and Winn.

### Purpose

- In response to the identified need for increasing the number of individuals pursuing health careers within a 21 parish area statewide, CLAHEC and LSUA agreed to collaborate to host and develop an educational program, "MASH", for secondary high school students which facilitates academic enrichment in health care sciences and improves basic awareness of health careers.

### Program in 2016

- 1<sup>st</sup> year – shared expense Carl Perkins/ Grant money
- Students received one hour college credit for HESC 1003
- CLAHEC picked up student tuition and instructor's salary for one hour college credit class
- Carl Perkins and CLAHEC shared expenses for supplies

### Program in 2017

Carl Perkins covered supply costs for program

Students received three hours college credit for HESC 1003 and HESC 1004 (New HESC class to be instituted to cover all three hours)

CLAHEC again picked up students' tuition costs

LSUA covered instructors' salary for three hours college cred

### AHEC Responsibilities

- Recruit and select participant students
- Provide students with information about LSUA and its health career programs
- Provide student MASH t-shirts and promotional materials
- Assist with publicizing and marketing program
- Provide tuition to students (limited number- 15)

#### LSUA Responsibilities

- Provide classroom space and laboratory facilities
- Provide instructors and lab supplies (through Carl Perkins funds) for the designated number of students
- Provide CLAHEC with itemized invoice
- Grant Students three hours of college credit in health science course

#### Requirements

- The **Medical Application of Science for Health (M.A.S.H.)** program is open to eleventh and twelfth grade students with at least a 2.5 GPA who have successfully completed other AHEC programs and meet current LSUA enrollment criteria.
- Application deadline is **in March**
- CLAHEC handles applications -To download an application, students go to [www.clahec.org](http://www.clahec.org)
  - go to *High School Program Applications*
  - click on *Central Louisiana Students*
  - scroll down to *MASH heading*
  - click on: [Medical Application of Science for Health 2016-2017](#) Application.

#### To apply, return the following:

- Completed application by deadline above
- Letter of recommendation from a teacher, counselor or principal
- Personal essay on what health career you are interested in (250 words or less TYPED)
- Current transcript

Mail completed application packets to Central LA AHEC

#### Information

- The program is an activity-filled 2 week college course that offers students who have an interest in health careers the opportunity to explore a variety of health careers and provides an introduction to the health care system.

- This three credit hour course is offered through this partnership of LSU-Alexandria and CLAHEC. The entire course is conducted on the LSU-Alexandria campus at its Allied Health Building.

- To introduce students to a number of allied health careers
- Allow students to have hands on experience in a variety of allied health professions
- Course taught by LSUA MLS faculty
- Class taught two full weeks at beginning of summer class semester Mon-Fri 8:00 am to 1:00 pm
- Class is taught by case study scenarios of various medical issues
- First 30-40 minutes of class consists of lecture and background of the case study scenarios
- Rest of the class consists of the students role playing the actual case study scenarios with a 15 minute break around 10:00 am

### Instructor Responsibilities

Implement written curriculum and daily lesson plans  
(format follows the overall goals of "MASH")

- Illustrate the application of basic scientific principles of health care
- Promote health care as a desirable and fulfilling profession

Provide daily introductory lecture on topics to be covered each day

Secure services of other presenters( if applicable) and provide them with topic guidelines and course objectives  
Assist CLAHEC/LSUA with publicizing program and obtaining photos  
Determine needs and secure necessary lab/clinical supplies for students

### What We Do

- Provide a daily itinerary of "MASH" program
- Provide students with MASH booklet
- Cover Case Studies and activities
- Perform laboratory/diagnostic testing activities
- Introduce many health professions career opportunities from the actual professionals' standpoint
- Cover communication issues in the healthcare profession
- Cover legal aspects of being in a healthcare profession
- Help develop critical thinking processes

### Summary of Day 1

- Present the ER Trauma Case Study
- Instructor explains diagnostic testing/radiology involved in case
- Students draw at random for their professional role
- Students are given instructions as to what is expected and introduced to the different sections of the "Hospital"
- As students role play the scenario, they are instructed in collecting vital signs, drawing blood, collecting patient histories, performing evaluations, x-rays and diagnostic testing, dispensing medications and performing physical therapy

### Summary of Day 2

- Present the Cardiac/Diabetic Case Study
- Instructor explains diagnostic testing/radiology involved in case
- Students draw at random again for their professional role
- Instructions given much as the day before and the same "Hospital" setup is used
- As students role play the scenario, they perform much of the same activities as day before with the addition of performing EKGs, CPR, and using an AED
- Diagnostic testing includes: urine dipstick testing, clinitest testing, SPOTCHEM analysis

### Summary of Day 3

- Present the Leukemia Case Study
- Instructor explains diagnostic testing/radiology involved in case
- Students draw at random again for their professional role
- Instructions given much as the day before and the same "Hospital" setup is used
- As students role play the scenario, they perform fingersticks/and or use screened blood tubes to use in diagnostic testing: making and staining blood smears, performing spin hematocrits, using microscopes to look at normal/abnormal blood smears, performing blood types

### Summary of Day 4

- Present the Forensic Case Study
- Instructor explains diagnostic testing
- Instructions are given
- As students role play the scenario, they perform diagnostic testing:
  - Examine crime scene
  - Blood spatter patterns
  - Collection and extraction of banana DNA
  - Collection and process of their own DNA
  - DNA electrophoresis of a prepared crime scene

### Summary of Day 5

- Present the Skeletal Bones and Facial Reconstruction Case Study
- Instructor explains diagnostic testing/skills involved in case
- Instructions are given
- As students role play the scenario, they perform activities listed:
  - Examine crime scene
  - Collection of bones/skull
  - Perform forensic lab calculations involving bones collected
  - Perform facial reconstruction of skull as partners

### Summary of Day 6

- Present the Microbiology/Parasitology Case Study
- Instructor explains diagnostic testing involved in case
- Instructions are given
- As students role play the scenario, they perform diagnostic testing/activities:
  - Swab their individual throats
  - Plate blood, MacConkeys, and a slant
  - Make a bacteriology slide and stain it as well as a gram positive/negative control slide
  - Check slides microscopically
  - Perform collection techniques on pet stools
  - Peruse parasitology slides and real life specimens

### Summary of Day 7

- Public Health Physician Director speaker, Dr. Holcombe
- Present the Infectious Disease Case Study
- Instructor explains diagnostic testing in case
- Instructions are given
- As students role play the scenario, they perform following activities:
  - Epidemiology exercise for infectious diseases
  - Flu testing, RSV testing, Strep testing, etc
  - Perform ELISA testing

### Summary of Day 8

- Present the Communication for Healthcare Professionals Case Study
- Instructor explains activities
- Students draw at random again for their professional role
- Instructions are given to individual professionals and to two different ER groups
- As students role play the scenario, they perform the following activities:
  - Take the personality assessment, conflict style resolution assessment
  - Communication charade activity with a partner
  - Split into their group or professional role
  - Perform the ER activity using all hospital departments\*\*

### Summary of Day 9

- Introduce guest professional lawyer/judge, Joshua Joy Dara, Jr.
- Present the Legal/Malpractice Case Study
- Instructor gives instructions on procedure
- Students draw at random again for their professional role
- As students role play the scenario of a medical malpractice case, they perform as:
  - Lawyers (defense, prosecution)
  - Defendant and client
  - Witnesses (defense, prosecution)
  - Jury
- Court is held and verdict rendered\*\*\*

### Summary of Day 10

- Instructor explains testing protocol
- Students take prepared online exam using a course management system ( 1½ - 2 hours given)
- Exam consists of at least five questions each from each of the previous days' lectures and activities
- At approximately 10:00 am, parents of students were invited to attend certificate ceremony
- AHEC coordinator gave a powerpoint presentation which included pictures of the students' activities from the previous nine days
- Students were invited to voice their opinions of the MASH program

## Day 10

- Students were asked to complete an evaluation form before leaving
- Students and parents were treated to lunch by AHEC office
- Parents were invited to peruse areas where students performed activities
- Students were awarded certificates and were advised of how three hours college credit was awarded and how to find final grade
- Final group picture taken

Thank You! Questions?

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