

COMM 311

Community Medicine Course
Department of Family & Community Medicine

Course Syllabus and Guide

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General Course Information:

Course Title: Community Medicine Course

Code & Number: COMM 311

Credit hours: 4

Course duration: Course will run throughout the 3rd academic year

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Specific Objectives:

By the end of this course, the students should be able to;

- Define the terminologies used in public health and preventive medicine.
- Describe healthcare systems in Saudi Arabia.
- Calculate different rates and indicators used to quantify public health problems and burden of disease.
- Discuss the basics of infectious cycles, epidemiologic triad and principles of disease control and prevention.
- Understand the dynamics between social determinants of health and how they impact health.
- Explain the effects of environments and occupations on human health.
- Understand the theories of health behaviors and how they can be utilized in the prevention and management of common health problems in the community.
- Demonstrate appropriate communication skills in patients counselling for common community problems.
- Demonstrate basic skills in taking anthropometric measurement and other skills needed in community health management.
- Demonstrate ability to address public health problems through policy.

Topic Learning Objectives:

See Appendix A

Course Overview:

I. Methods of Instruction

The course is taught using **Lectures, Tutorials, and Seminars.**

Lectures:

These will be delivered by the designated faculty. The objectives of each lecture in this student guide will be used as reference. Kindly refer to the tables below for each lecture objectives.

Tutorials:

These are planned to follow on the concepts delivered in each lecture. The class will be divided into small groups (approx. half of the class in each group). Case based scenarios and exercises developed by the respective faculty, and approved by the course coordinator, will be given to groups of students then solved and discussed between faculty and students. Feedback will be provided to the students during the session.

The faculty who is to deliver the session related to the tutorial, will be responsible for developing the scenarios and conducting the tutorial with other faculty members at the same allotted time. In addition, OSCE scenarios will be based on the tutorial sessions.

Seminars:

In an effort to keep our students more engaged and to introduce them to public health real-world applications, we have introduced seminars that will be presented by distinguished guest speakers who have worked on national or international research and public health programs.

The speakers will be covering the topics of:

- National surveillance program
- Premarital screening and counseling in Saudi Arabia
- HIV and AIDS
- Road traffic accidents
- Geriatric Health
- Mass gathering and disaster medicine
- Global health organizations

The seminars will be delivered in the main auditorium for both male and female students. Announcements of the time, date and speaker biographies will be provided to the students and faculty before the seminar, as their times may change from what has been assigned due to conflict with the speakers' schedules.

I. Methods of Assessment:

1) Continuous Assessment: 60%

Midterm MCQ Exam	30 Marks
Quizzes	10 Marks
Poster Presentation	12 Marks

2) Final Exams: 40%

Final MCQ Exam	20 Marks
Final OSCE	20 Marks

MCQ Exams

There will be two MCQ exams covering all topics given throughout the course. The midterm exam topics will include the topics administered until the week before the midterm exam. The final MCQ exam will include 90% of all remaining topics not covered in the midterm exam, and 10% of the midterm topics.

OSCE

The OSCE stations will be formulated on the guidelines and format of the examination and assessment, in accordance to the medical education department. Please refer to Appendix B for these guidelines. A sample of an OSCE case can be viewed in Appendix C.

Quizzes

Students are expected to attend all lectures, tutorials and seminars. Quizzes will be related to the main lectures, and will be conducted in a “pop-quiz” format, at the end of the lecture. Each faculty is expected to give at least one pop-quiz during the academic year, which will add up to a total of approximately 10 quizzes per year. Thus, students are expected to attend all lectures in order not to miss any of the pop-quizzes, as **there will not be any replacement quizzes**. Instead, the final quiz score will be calculated from the average of all quizzes that were conducted during the academic year. Quizzes can be conducted using Blackboard or paper-form.

Poster Presentations

Students will be assigned to groups of 6-8 (based on the class size). They will choose a national public health issue of interest and a faculty supervisor from the Family and Community Medicine Department. The overall goal of the project is to design an intervention to address the public health issue based on concepts learnt throughout the course. Students are to approach the selected supervisor **at least 6 weeks** before the scheduled date for the poster presentation event. Each group is expected to fill the **Supervisor Assignment Form** (which students will receive via email during the second

semester) and send it to the course administration. In case the student group does not approach the faculty at the recommended time, the faculty member is allowed to refuse supervising that particular group's project. Further details about the project format and grading rubric will be provided during the second half of the year.

Faculty supervisors for the posters will receive evaluation forms from the course administration during the second semester. They are expected to monitor the students' attendance for planning and preparation of the poster and evaluate them accordingly. Students are expected to work closely on the preparation of the poster with the faculty supervisor, based on an agreed schedule.

I. Resources for learning

Main textbook

Park's textbook of Social and Preventive medicine. 27th edition.

The 23rd edition can be accessed for free through the following link:

<https://milonm28.wordpress.com/wp-content/uploads/2017/08/parks-preventive-social-medicine-23rd-ed.pdf>

Other Resources

- Maxcy-Rosenau –Last 15th edition. Available online.
- Public Health and Community Medicine. Ilyas Ansari. Edition: 8th
- Textbook of Preventive and Social Medicine. Mahajan and Gupta.
- Textbook of Epidemiology. Leon Gordis
- Any other resources provided to the students by the faculty will be clearly stated in the powerpoint presentation and would be considered as additional resources. This can include articles, guidelines and website.

Appendices:

Appendix A: Topic Learning Objectives

L=Lecture, T=Tutorial, S=Seminar

Topic	Class type	Speaker	Learning Objectives
1. Introduction to public health and preventive medicine	L	Dr. Leena & Dr. Hani	<ol style="list-style-type: none">I. Provide an overview of the course 311, its resources and assessment strategiesII. Introduce students to basic concepts of public health, preventive medicine, and understand their relevance in global health deliveryIII. Define and understand basic terminologies used in the field of preventive medicine, and public health
2. Natural history of Disease and Concepts of Prevention and Control	L	Dr. Shatha Alduraywish	<ol style="list-style-type: none">I. Describe theories postulated for the development of diseasesII. Explain the concept of iceberg phenomenon of diseasesIII. Understand the relationship between host, environment and agent in disease causation (epidemiology triad)IV. Define the term preventionV. Identify the level of prevention in relation to stage of disease developmentVI. Identify the measures applied at each level of prevention with regard to controlling the reservoir, interruption of transmission, and the susceptible host

3. Global Demography Concepts and Population Pyramid	L	Dr. Rufaidah Al-Dabbagh	<ul style="list-style-type: none"> I. Define the terms; demography and population dynamics II. Describe major sources of population data III. Describe features of population pyramid and compare the pyramids of developed and less developed nations IV. Describe and understand the theory of demographic transition V. To list the different types of population pyramid and describe the characteristics of each VI. Understand the current Saudi population pyramid VII. Discuss in detail the implications and future health needs of Saudi Arabia, based on the current population and demographic transition of KSA VIII. to understand the impact of different demographic indicators on population growth (mortality, fertility, migration, economic growth) IX. Compute and interpret dependency ratio
4. Demography (Rates and Population Pyramid) National Focus	T	Dr. Rufaidah & Dr. Abdulaziz	<ul style="list-style-type: none"> I. To describe, name and interpret the types of population pyramid II. To identify and describe the stage of demographic transition based on the country's relation between fertility and mortality rates III. To describe the implications of changes in demographic indicators on future planning for healthcare systems
5. Determinants of Health	L	Dr. Nurah Al-Amro	<ul style="list-style-type: none"> I. Understand the spectrum of health in relation to health and sickness II. Define; health, disease, illness and wellbeing III. Define and understand the detriments of health; biological, behavioral, social, cultural, environmental, socioeconomic, health services, and aging and sex IV. Understand the concepts of "right to health " and "health for all

6. Principles of Epidemiology	L	Dr. Nourah Abuammoh	<ul style="list-style-type: none"> I. Understand the history, principles, and concepts of epidemiology II. Define and calculate prevalence and incidence III. Recognise and explain the role, strengths and challenges of the epidemiologic approach in contributing to our understanding of health and illness IV. Assess whether observed associations are likely to be causal or non-causal V. Identify the difference between internal and external validity and their role in critically appraising epidemiologic research VI. Understand and apply epidemiological concepts as they relate to specialized fields of epidemiology, including infectious disease epidemiology, disease prevention and screening
7. Principles of Epidemiology	T	Dr. Armen & Dr. Abdulaziz	<ul style="list-style-type: none"> I. To practically calculate and apply measures of disease occurrence II. To differentiate between the measures of association and their calculation formulas, and the epidemiologic studies in which they can be used III. Critically appraise published epidemiological studies through qualitative appraisal and assessment of their internal and external validity
8. Surveillance and Screening	L	Dr. Shatha Alduraywish	<ul style="list-style-type: none"> I. Define surveillance II. Recognize the elements of surveillance system, understand the different types, and their aims and uses III. Define screening IV. Discuss the role of screening in surveillance systems V. Explain the concept of screening and the lead time VI. Explain the difference between “screening”, “case finding”, “periodic examination” VII. State the criteria of an ideal screening test VIII. Calculate metrics for evaluation of validity of a screening test (sensitivity, specificity...etc.) IX. List the reportable diseases nationally and internationally (based on WHO guidelines)

9. Surveillance	S	Dr. Suliman Alghanam	<ol style="list-style-type: none"> I. To understand the basic tools for preparation of infectious disease surveillance programs II. To describe the practical application of surveillance systems in the context of active epidemics and pandemics on the national level. III. To explain the challenges and lessons learnt from the COVID-19 pandemic on the national level.
10. Screening	T	Dr. Noura & Dr. Abdulaziz	<ol style="list-style-type: none"> I. Explain the concept of screening and the lead time II. State the uses of screening programs III. State the criteria of health problems amenable for screening IV. Outline the differences between screening and diagnostic test V. Compute and interpret: Sensitivity, Specificity, Predictive value positive, Predictive value negative, False positive rate, False negative rate, through practical exercises
11. Prevention and Control of Infectious Disease Pandemics	L	Dr. Noura Aboammuh	<ol style="list-style-type: none"> I. Define communicable disease, control, elimination and eradication II. Draw the cycle of infection III. Give examples of different types of infectious agents associated with diseases in humans IV. List types of reservoirs of infection V. Classify carriers and explain their public health importance in disease transmission VI. Illustrate with examples the different modes of transmission of communicable diseases VII. Define incubation period VIII. Classify and differentiate types of immunity IX. Outline the measures for prevention and control of communicable diseases

12. Burden of Disease	L	Dr. Nurah Alamro	<ul style="list-style-type: none"> I. List and describe the different indicators for measuring burden of disease II. Understand the importance of measuring burden of diseases at national and international levels, and their impact on prioritization of and planning for public health prevention programs III. To be able to identify the reliable sources for retrieving burden of disease metrics both nationally and internationally IV. To list and identify the diseases of greatest burden of disease globally (global burden of disease), and nationally V. Explain the need to use “indicators” to measure “health” status VI. State the characteristics of health indicators VII. List the uses of health indicators VIII. State with examples the types of health indicators
13. Disparities in Health	L	Dr. Nurah Alamro	<ul style="list-style-type: none"> I. Identify vulnerable populations and at-risk-population for diseases II. Understand the influence of socio-economic status, sex, race and nationality on health.
14. Social and Behavioral Health	L	Dr. Rufaidah Al-Dabbagh	<ul style="list-style-type: none"> I. Introduce students to concepts of social and behavioral theories. II. Define health behaviors and understand how behavioral change happens. III. Understand how social and behavioral theories can be used to identify, conceptualize and resolve different public health issues. IV. Understand social norms theories and their effect on health attitudes and practices. V. Familiarize students with limitations of these theories.

15. Adolescent and Child Health	L	Dr. Hafsah Raheel	<ol style="list-style-type: none"> I. Understand what are adolescent and children health issues globally and the burden of diseases in this age group II. Discuss major global interventions that are to address public health issues in adolescents and children III. Discuss and understand what preventive services for adolescent, and child health are delivered in KSA and globally. IV. Familiarize students with the national child immunization schedule
16. Maternal Health	L	Dr. Hafsah Raheel	<ol style="list-style-type: none"> I. Understand the maternal health issues globally II. Understand the causes of maternal deaths and mortality III. Understand the interventions done globally to decrease maternal deaths and morbidity IV. Discuss and understand what preventive services for maternal health are delivered in KSA
17. Premarital Screening and Counseling: A National Success Story	S	Dr. Suha Alsulimani	<ol style="list-style-type: none"> I. To describe the history of development of the Saudi premarital screening program II. To list the different diseases that are included in the national screening program III. To describe the impact of such a program on the reduction in these diseases (impact on disease prevention) and compare to other premarital programs in other countries. IV. To understand the importance of counseling in the application of such a program
18. Sexual and Reproductive Health	L	Dr. Lemmese Alwatban	<ol style="list-style-type: none"> I. Define the terms Reproductive Health and Sexual Health. II. Identify the influence of medical, social and political perspectives on sexual and reproductive health and their effect on policy, research and practice. III. Define and use demographic measures related to fertility IV. Identify national policies in KSA related to SRH.

19. Tobacco and Vape Use	L	Dr. Shatha Alduraywish	<ul style="list-style-type: none"> I. Discuss epidemiology of smoking in Saudi Arabia II. Recognize types of smoking. III. Recognize risks of smoking (morbidity /mortality). IV. Recognize the effect of passive smoking (children /pregnant). V. Enlist Nicotine replacement treatments (any updates) VI. Describe and compare the public health measures to control tobacco use globally and in KSA. VII. Explore the effects of legislations, including taxation on smoking rates.
20. Smoking Cessation and Counseling	T	Dr. Shatha & Dr Afnan	<ul style="list-style-type: none"> I. Demonstrate counseling skills for smoking cessation II. To be able to take history of tobacco use in a preventive clinical setting III. To list the different nicotine replacement treatments available for patients (over-the-counter vs. prescription) IV. To help direct patients to proper smoking cessation centers (be familiar with available local on-campus centers, as well as in Riyadh)
21. Substance Use	L	Dr. Rufaidah Al-Dabbagh	<ul style="list-style-type: none"> I. Describe the burden of substance use, and abuse globally and nationally II. Understand the difference between: use, and substance use disorder III. List the different health complications and sequelae for select substances IV. Take a patient history for screening for substance use in a preventive clinical setting V. List the presenting symptoms for individuals with substance use addiction, or intoxication VI. List the national policies available for prevention and control of substance use in the Kingdom (e.g. National Committee for Tobacco Control, National Authority for Narcotics Control)

22. Substance Use	S	Dr. Faris Alharbi	<ul style="list-style-type: none"> I. Describe the burden of substance use, and abuse nationally II. Describe the national policies available for prevention and control of substance use in the Kingdom (e.g. National Committee for Tobacco Control, National Authority for Narcotics Control) III. Describe how health policies related to substance use came to place IV. Describe obstacles faced to implement policies on the ground.
23. Peripartum Health and Breastfeeding Counseling	T	Dr. Hafsa Raheel	<ul style="list-style-type: none"> I. Demonstrate counseling skills for an antenatal session with focus on brief history taking, and counseling regarding nutrition, vaccination and assessment of mental health status of pregnant mothers II. Demonstrate counseling skills for promotion of breastfeeding (focused on benefits of breastfeeding for the mother and child, and correct way of breastfeeding, advise on prevention on breast engorgement and breast abscesses) III. Demonstrate skills in assessing the mental health state of postpartum women and identifying red flags for postpartum blues and depression
24. School Health Services	S	Prof. Suleiman Alshammari	<ul style="list-style-type: none"> I. Define school health services II. List components of school health III. Define responsibilities of school health team members IV. Define functions of school health programs and preventive services that can be provided in school setting V. Define School health services in KSA, scope and structure VI. List the common conditions school health deals with in KSA VII. Be introduced to national school health programs in the Kingdom
25. Introduction to Health Policy	L	Dr. Hani Alghamdi	To be announced (in lecture)

26. Health Education and Counseling	L	Dr. Rufaidah Al-Dabbagh	<ol style="list-style-type: none"> I. Define "health education" and state its aims II. Explain the role of health education in relation to the stage of disease prevention III. Define learning and identify the domains of learning IV. Familiarize students with the direct and indirect methods of communicating health messages and state their strengths and limitations V. State the types and values of audiovisual aids in facilitating the transfer of health message VI. Apply health education concepts to community setting scenarios by: <ol style="list-style-type: none"> a. Providing problem statement b. Analyzing the problem by specifying the behavior and non-behavioral factors
27. Geriatrics Health	S	Dr. Walid Kreidy	<ol style="list-style-type: none"> I. Understand the definitions of Geriatrics and Gerontology II. Describe physiological and pathological aging III. Understand health issue of the elderly population globally IV. Explain the demographic changes associated with aging of the population V. Explain the demographic changes associated with aging of the population in KSA VI. List the health and social problems associated with aging in KSA VII. Describe the interaction between various factors contributing to geriatric health VIII. Discuss existing Global and national programs for elderly care
28. CVD: Prevention and Control	L	Dr. Leena Baghdadi	<ol style="list-style-type: none"> I. Recognize the Public health significance of CVD II. Understand the global burden of CVDs III. Identify the risk factors, high risk groups and complications of CVDs IV. Recognize Screening strategies for CVDs V. Familiarize students with measures of CVD Prevention and control globally and in the local context

29. Lifestyle Medicine (Modifiable Risk Factors)	L	Dr. Mohammed Almansour	<ol style="list-style-type: none"> I. Discuss Define selected NCD risk factors, such as, Tobacco use, Diet and Nutrition, Physical activity, Obesity and Overweight of smoking in Saudi Arabia II. Present the epidemiology and significance of those risk factors globally and in KSA III. Discuss causes, high risk populations and consequences of the NCD risk factors IV. Recognize screening strategies of the selected risk factors for NCD V. Provide examples of evidence-based interventions to prevent and control those risk factors VI. Describe burden of disease of obesity, causation factors, in Saudi Arabia VII. Present global strategy on diet, physical activity, and health VIII. Identify the programs for prevention and control for those problems in Saudi Arabia
30. Lifestyle Medicine	T	Dr. Mohammed & Dr. Afnan	<ol style="list-style-type: none"> I. Demonstrate history taking skills for patients coming in for lifestyle advice II. Demonstrate counseling skills for dietary advice, and obesity reduction using scenarios
31. Chronic Diseases Counseling	T	Dr. Leena & Dr. Armen	<ol style="list-style-type: none"> I. Demonstrate history taking and counseling skills regarding NCDs risk factors and prevention.
32. Diabetes Prevention and Control	L	Dr. Hafsah Raheel	<ol style="list-style-type: none"> I. Understand Global prevalence of diabetes II. Understand the Epidemiology of diabetes in KSA III. List the risk factors and complications of diabetes IV. Discuss preventive measures within the framework of NCDs V. Recognise screening strategies of Diabetes VI. Know preventive programs in KSA towards DM VII. Outline how to take history of risk factors of diabetes, and how to give preventive advise

33. Prevention and Control I	L	Dr. Hani Alghamdi	<ul style="list-style-type: none"> I. List and define the different levels of prevention (primordial, primary, secondary, and tertiary) II. Provide practical examples for each, and identify each type from given scenarios III. Understand the national health implications for focusing on each of these prevention types, and their impact on health systems costs and spending IV. Describe the important national prevention policies in the history of Saudi Arabia and their impact on disease burden (e.g. immunization program)
34. Prevention and Control II	L	Dr. Hani Alghamdi	<ul style="list-style-type: none"> I. Discuss and elaborate Goals of NCD prevention and control II. Identify current challenges in NCD control III. Discuss and understand the global framework of prevention and control of NCDs IV. Identify different interventions for NCD control V. Understand intrapersonal approaches for NCD control VI. Understand organizational level interventions VII. Identify different community factors in NCD control VIII. Familiarize students with different health policies and legal interventions for NCDs in the global and national contexts.

35. Communicable Respiratory Diseases	L	Dr. Afnan Younis	<ol style="list-style-type: none"> I. List the different hosts for influenza (according to influenza type), MERS-Cov and SARS II. Familiarize students with the most famous pandemics for these viral infections, and measures used to contain spread III. Identify the different elements in the infection cycle IV. Understand the epidemiology and global burden of TB V. List the sign and symptoms and risk factors of different types of TB, with particular emphasis on pulmonary TB VI. Describe trends and state reasons for resurgence of pulmonary TB VII. Describe measures for prevention and control for TB VIII. Describe the role of WHO to address the global burden of TB
36. Zoonotic Disease and One Health	L	Dr. Kholood Altassan	<ol style="list-style-type: none"> I. Describe the global burden of disease from zoonotic disease II. Understand the most important zoonotic diseases of public health significance in Saudi Arabia; Brucellosis; Bovine TB; Mers-Cov III. Understand the epidemiology of these infections in Saudi Arabia IV. To define the modes of transmission for the infectious agents responsible for these diseases V. To list factors for acquiring these infections VI. To enumerate the global measures needed for prevention and control of these diseases VII. To describe the measures taken by the government (health sector and agricultural sector) to prevent and control these infections VIII. Outline how to take history of risk factors of these diseases, and how to give preventive advise

37. Vector Borne Diseases	L	Dr. Afnan Younis	<ol style="list-style-type: none"> I. Understand the epidemiology and global burden of malaria II. Understand the cycle of infection of malaria III. Define modes of transmission, clinical features, risk factors, community diagnosis and treatment for malaria (Outline how to take history of Malaria patient, and how to give preventive advice) IV. Enlist the factors responsible for antimalarial drug resistance. V. Understand the role and measures taken by WHO to combat the burden of Malaria globally VI. Enlist the global measures of prevention and elimination for Malaria VII. Understand the epidemiology and risk factors related to Malaria in KSA
38. Food Borne Diseases	L	Dr. Rufaidah Al-Dabbagh	<ol style="list-style-type: none"> I. Describe the types and classification of foodborne diseases (chemical, infectious, etc.) II. Describe the types of contaminants in food and their modes of transmission III. Describe the national and global burden attributed to foodborne disease IV. List factors associated with foodborne illness V. Understand the preventive measures needed for control of these diseases VII. Describe the role of various governmental and non-governmental organizations in prevention and control of foodborne disease

39. Mental Health	L	Dr. Basmah Almujaadadi	<ul style="list-style-type: none"> I. Understand the definition and etiology of mental health II. Discuss the global burden of disease III. Define stigma and explain its consequences on mentally ill patients, their families and treatment outcome IV. Understand the principles of preventing mental illness, list and classify the factors contributing to mental illnesses and prevention V. Describe the public health importance of mental health in KSA (burden, morbidity, mortality, cost effectiveness) VI. Name national mental health care services, programs, and efforts.
40. HIV and AIDS	L	Dr. Aynaa Alsharidi	<ul style="list-style-type: none"> I. Describe the epidemiology and global burden of HIV/AIDS infection II. Understand the different paths of HIV transmission III. Understand the global initiatives to combat the rising burden of the disease IV. Learn the features which characterize the pandemic in the EMR V. Recognize the epidemiology, burden of disease, and National measures to prevent spread of viral hepatitis in KSA VI. Recognize the epidemiology, burden of disease, and National measures to prevent spread of viral hepatitis in KSA VII. Differentiate what could work best, as far as prevention and control efforts are concerned, in our region
41. Outbreak Investigation	L	Dr. Armen Torchyan	<ul style="list-style-type: none"> I. Understand what constitutes to an outbreak II. To differentiate between endemic and epidemic III. Learn the importance of investigating an outbreak IV. Be familiar with the steps for an outbreak investigation V. list types of studies used to investigate an outbreak

42. Outbreak Investigation	T	Dr. Armen & Dr. Afnan	<ol style="list-style-type: none"> I. Read an epidemic curve and use it in estimating the incubation period II. Calculate the attack rate from outbreak investigation data III. To collect information about important indicators needed to solve an outbreak (history, physical examination and laboratory testing) IV. To form a line list for the outbreak using the information collected during the practical session V. To conduct a quick epidemiologic investigation using information collected from the line-list
43. Environmental Health	L	Dr. Kholood Altassan	<ol style="list-style-type: none"> I. To understand the definition of environmental health and components of the environment II. To describe the interaction between humans and the environment III. To understand common concepts in environmental health; exposome, environmental risk transition, sensitive populations IV. To understand the framework for disease prevention in environmental health V. To identify global environmental health priorities VI. To describe the environmental health situation globally VII. To identify air pollutants, their sources and effects VIII. To describe water sources and the hydrological cycle IX. To identify water pollutants, their sources and effects X. To describe methods for prevention of air and water pollution XI. To identify diseases attributed to environmental pollution

44. Occupational Health	L	Dr. Kholood Altassan	<ol style="list-style-type: none"> I. Describe the field of occupational health and its historical origins II. Understand the impact of work related disease and injuries particularly on vulnerable populations III. Enlist and understand the types, characteristics, and effects of occupational hazards IV. Describe symptoms and signs of major occupational diseases V. Understand measures of prevention and control of occupational hazards
45. Climate and Health	L	Dr. Kholood Altassan	<ol style="list-style-type: none"> I. Understand the basic scientific theories describing climate change including the greenhouse effect. II. Describe the global impact of climate change on resources and health III. Differentiate between climate change mitigation and adaptation efforts. IV. Describe the role of global organizations in addressing climate change prevention and control. V. Describe the role of the health community in climate change mitigation and adaptation.
46. Heat Related Injuries	L	Dr. Marwah Hassounah	<ol style="list-style-type: none"> I. Define and classify heat stress and its types (heat stroke, heat exhaustion) II. Define the clinical presentation of each (symptoms, signs, complications, and investigations) III. Describe the public health importance of heat stroke and heat exhaustion (morbidity, mortality, and cost effectiveness) IV. Explain the distribution (place, person, time) in the global, regional, and local contexts, including the incidence rate during Hajj. V. Explain the determinants (risk factors) of heat stress and its types VI. Explain preventive and control measures, including the MOH device for Hajjis with heat stroke VI. Recall the Ministry of Labor regulations regarding heat stroke.

47. Public Health Communication	L	Dr. Marwah Hassounah	<ul style="list-style-type: none"> I. Understand common concepts in effective public health communication II. Describe some of the common models of risk communication IX. List some of the common methods of public health communication such as PSAs and community outreach campaigns in both the global and national contexts
48. Travel Medicine Counseling	L	Dr. Hafsah & Dr. Marwah	<ul style="list-style-type: none"> I. Define travel medicine and identify its components II. List the groups of travelers who are at a special risk (infant's children, pregnant women, elderly, pre-existing illnesses, diabetics) III. State the responsibilities of travelers to prevent ill-health IV. List the risk associated with international travel and related health problems V. Outline the specific preventive measures for international travelers in relation to the destination VI. Enlist contents of travel kit VII. Outline how to take travelers history and give advice regarding vaccination and other health precautions related to the travel destination
49. Cancer: Prevention and Control	L	Dr. Haytham Alsaif	<ul style="list-style-type: none"> I. Appreciate the Global impact of cancer II. Identify the most prevalent cancers worldwide, in the region and in KSA III. Identify the leading causes of cancer deaths IV. Understand the cancer control continuum and explain its implication to public health V. Screening for cancer VI. Understand and reflect the Kingdoms efforts to control the rising burden of Cancers in KSA VII. Explain important factors and trends affecting cancer control and directions for future research VIII. Outline how to take history of risk factors of cancer, and how to give preventive and screening advise

50. Cancer Counseling	T	Dr. Haytham & Dr. Leena	I. taking history of most prevalent cancers in Saudi Arabia including Breast, Colorectal, Thyroid (papillary) and Lung cancer.
51. Cancer in the Kingdom of Saudi Arabia	S	Dr. Saleh Alessy	I. To familiarize the students with the priorities of cancer research in the Kingdom II. Describe the major cancer control initiatives at the population level III. Explain the newest trends in research development for population health management of cancer IV. Describe the national level transformation initiatives related to cancer prevention and control
52. Mass Gathering/ Disaster Medicine	S	Dr. Anas Khan	I. Enlist the diseases and health risks related with mass gatherings and Hajj II. Understand the importance of surveillance and reporting of these diseases at the national and International level III. Appreciate KSA's efforts to address and recognize the health risks and diseases during Hajj and disasters
53. National and Global Health Policies and Regulations	L	Dr. Nurah Alamro	I. Understand the difference between the old and new healthcare system in the Kingdom II. Describe the drivers for the national healthcare transformation III. To list the aims of the national healthcare transformation IV. Understand the difference between the different bodies for the new Saudi healthcare system (provider, regulator and payor) V. Familiarize students with concepts important for developing the new healthcare system approach (e.g. population health management, new model of care)
54. Global Health Organizations	S	Prof. Lubna Al-Ansari	I. Understand what is a health policy II. Understand why health policies are needed? III. Differentiate between macro and micro policies IV. Familiarize students with different factors that need to be assessed while formulating a health policy

Appendix B: Students 'Guides for the Objective Structured Clinical Examination (OSCE) for the Community Medicine Course (COMM 311)

Prepared by: Dr. Kholood Altassan and Dr. Nour Horanieh
Approved by: Dr. Rufaidah Dabbagh and Dr. Leena Baghdadi

Venue: OSCE rooms second floor, the College of medicine western wing

Introduction:

This is a brief guide to the OSCE stations which have been scheduled and explained to you from the beginning of the course. OSCE stations are very straight forwards cases.

General Aims of the OSCE:

To assess the competencies which were covered during our teaching sessions according to your course learning outcomes (CLOs), and to determine the ability of the student to apply preventive medicine and public health skills in a clinical and community setting.

Specific Objectives of the OSCE in COMM 311:

Students should be able to:

1. **Apply Preventive Medicine Skills:** Provide patients and/or clients with education and counseling regarding risk factors and prevention of diseases related to:
 - a) Non-communicable diseases like diabetes, obesity, and hypertension
 - b) Infectious diseases like Tuberculosis, Malaria, hepatitis, HIV, as well as zoonotic diseases
 - c) Smoking
 - d) Maternal health issues like breast feeding and peripartum depression
 - e) Healthy lifestyle
 - f) Child Health like vaccination and growth charts
 - g) Traveling and/or going to Hajj
2. **Apply Public Health Skills:** Interpret health indicators and other data resources relevant to prevention and control of diseases in both clinical and community settings

OSCE Goals:

The OSCE stations will accomplish assessment of students in the following competencies:

1. **Cognitive skills:** Health promotion and disease prevention, decision making and problem solving; risk identification, screening, diagnosis and management of common public health diseases in the Saudi community.
2. **Interpersonal skills:** Communication, counseling and health education of patients.

OSCE setup:

- The OSCE will have graded stations; each station will be **6 minutes** long. An extra **half minute** will be provided to allow students to read the scenario of the station and move from one station to another.
- The stations will be a mix of observed (by an examiner) and unobserved stations.
- Tasks can be a combination of focused history taking, assessment of risk factors and education/counseling for behavioral modification, as needed for health promotion and disease prevention.
- History should include the individual's age, sex, current health status, occupation, exposure to risk factors, and lifestyle, in addition to relevant questions pertaining to the assessment of the case at hand.
- Tasks on advice on protective screening, (e.g., immunization etc) can also be included.
- Scenarios may contain, pictures, charts, health related data, or indicator calculations as task assessment.
- A specific student's instruction will be added for each station where tasks by students to be performed will be described clearly.
- All stations shall be designed to assess integrated practical, clinical, and community encounters.
- Each OSCE station will be assessed with a predetermined performance scored checklist.
- All OSCE stations are prepared and will be conducted under the specific guidelines laid down by the Medical Education Department, Assessment & Evaluation Centre College of Medicine, to cover the COMM 311 CLOs.

POSSIBLE topics that could be included in the OSCE preparation:

1. **Public health concepts:**
 - Health indicators
 - Demography rates and principles of epidemiology
 - Screening

2. **Infectious diseases:**

- Tuberculosis (TB)
- Malaria
- Emerging infectious diseases
- National zoonotic diseases
- Immunizable diseases and travel medicine
- Outbreak investigations

3. **Non-communicable diseases**

- Diabetes
- Cancer
- Cardiovascular Diseases
- Tobacco use and smoking
- Physical activity, obesity, and nutrition
- Risk factors, Prevention and control of NCDs
- Breastfeeding counseling
- Lifestyle counselling
- Peripartum blues

4. **Others:**

- Health education and communication in clinical and community settings.
- Travel medicine

Appendix C: SAMPLE OSCE CASE AND CHECKLIST

College of Medicine

Department of Family and Community Medicine Objective Structured Clinical Examination Course 311

(Information for student)

Patient Brief Record / Brief Scenario:

Ahmed is a 36-year-old taxi driver, consults you with his laboratory results.

Fasting plasma glucose: **8.0 mmol/L (144 mg/dl)**
HbA1C: **8 %**

TASK: (What is expected from a student)

1. Take a **brief focused** history
2. **Educate** the patient regarding lifestyle modification and secondary

NOTE: PHYSICAL EXAMINATION IS NOT REQUIRED

**Department of Family and Community Medicine
Objective Structured Clinical Examination (OSCE)**

Student's Name: _____

Marking schedule

#	Domains/ Tasks	Mark	done	Partially done	Not done
	Professional behavior <ol style="list-style-type: none"> 1. Builds rapport; polite, meets and greets patient 2. Good posture with appropriate body language 3. Shows empathy 4. Good eye contact 5. Avoids interrupting patients as far as possible 				
	Data gathering <ol style="list-style-type: none"> 1. Personal Hx (name, age marital status, employment) 2. Presenting symptoms (duration, type of symptoms, frequency, appetite, weight loss, polyuria, polydipsia...etc.) 3. Risk factors related to presenting problem (e.g. other chronic conditions related to DM, medications, smoking, hypertension, hyperlipidemia...etc) 4. Any other symptoms 5. Past medical history 6. Family history of DM 				
	Management/advice/education <ol style="list-style-type: none"> 1. Education and emphasis on regular DM medication intake, self-monitoring of blood glucose 2. Explain the importance of healthy diet to control DM (increasing fiber and lean meat intake, while avoiding high fat and high sugar foods) 3. Educate regarding physical activity (150 minutes of moderate physical activity per week, such as walking, is ideal to control DM) 4. Confirm patient understood the information 5. Plan for next visit 6. Thank the patient and say good bye 				
	Total Marks				

Examiner's feedback about student:

Appendix D: Comm 311 Schedule 2024 -2025:

Week	Male A Date & Time	Male B Date & Time	Female Date & Time	TOPICS	INSTRUCTOR
1	20/08/2024	20/08/2024	19/08/2024	Introduction to Public Health and Preventive Medicine(Course introduction)	Dr. Leena & Dr. Hani
	8:00-9:00	10:00-11:00	10:00-11:00		
	21/08/2024	21/08/2024	19/08/2024	Natural history of disease and concepts of prevention and control	Dr. Shatha Alduraywish
	9:00-10:00	1:00-2:00	11:00-12:00		
2	26/08/2024	28/08/2024	25/08/2024	<u>Lecture</u> Global demography concepts & Population Pyramid	Dr. Rufaidah Dabbagh
	8:00-9:00	8:00-9:00	1:00-2:00		
	08/09/2024	28/08/2024	25/08/2024	<u>Lecture</u> Determinants of Health	Dr Nurah Alamro
	2:00-3:00	11:00-12:00	2:00-3:00		
3	02/09/2024	29/08/2024	03/09/2024	<u>Tutorial</u> Demography (Rates & Population Pyramid) National focus	Dr. Rufaidah & Dr. Almazem
	2:00-3:00	1:00-2:00	10:00-11:00		
	02/09/2024	29/08/2024	03/09/2024	<u>Lecture</u> Principles of Epidemiology	Dr. Noura Abouammoh
	3:00-4:00	2:00-3:00	11:00-12:00		
4	10/09/2024	05/09/2024	09/09/2024	<u>Lecture</u> Surveillance and Screening	Dr. Noura Abouammoh
	9:00-10:00	10:00-11:00	11:00-12:00		
	11/09/2024	05/09/2024	11/09/2024	<u>Tutorial</u> Principles of Epidemiology	Dr. Armen & Almazem
	10:00-11:00	11:00-12:00	1:00-2:00		
5	15/09/2024	08/09/2024	16/09/2024	<u>Lecture</u> Prevention & Control of infectious disease pandemics	Dr. Noura Abouammoh
	2:00-3:00	1:00-2:00	8:00-9:00		
	17/09/2024	10/09/2024	15/09/2024	Burden of Disease	Dr Nurah Alamro
	2:00-3:00	3:00-4:00	2:00-3:00		
	12/09/2024 3:00-4:00			<u>Seminar</u> Surveillance	Dr. Suleiman Alghannam
6	25/09/2024	25/09/2024	24/09/2024	<u>Tutorial</u> Screening	Dr. Noura & Dr. Armen
	10:00-11:00	11:00-12:00	8:00-9:00		
	25/09/2024	25/09/2024	29/09/2024	<u>Lecture</u> Disparities in Health	Dr. Nurah Alamro
	11:00-12:00	1:00-2:00	2:00-3:00		
7	30/09/2024	11/09/2024	01/10/2024	<u>Lecture</u> Social and Behavioral Health	Dr. Rufaidah Dabbagh
	1:00-2:00	10:00-11:00	8:00-9:00		
	02/10/2024	17/09/2024	03/10/2024	<u>Lecture</u> Adolescent & Child Health	Dr. Hafsa Raheel
	8:00-9:00	8:00-9:00	8:00-9:00		
	06/10/2024	29/09/2024	08/10/2024	<u>Lecture</u> Maternal Health	Dr. Hafsa Raheel
	1:00-2:00	11:00-12:00	8:00-9:00		
29/09/2024 3:00-4:00			<u>Seminar</u> Premarital screening & counseling: A national success story	Dr. Suha Alsulimani	
9	13/10/2024	08/10/2024	15/10/2024	<u>Lecture</u> Sexual and Reproductive Health	Dr. Lemese Alwatban
	11:00-12:00	1:00-2:00	09:00-10:00		

	14/10/2024	09/10/2024	16/10/2024	<u>Lecture</u> Tobacco and vaping use	Dr. Shatha Alduraywish
	2:00-3:00	11:00-12:00	10:00-11:00		
	21/10/2024	13/10/2024	22/10/2024	<u>Tutorial</u> Smoking cessation & counseling	Dr. Shatha, Dr. Afnan
	2:00-3:00	11:00-12:00	9:00-10:00		
	23/10/2024	22/10/2024	22/10/2024	<u>Lecture</u> Substance Use	Dr. Rufaidah Dabbagh
	10:00-11:00	10:00-11:00	11:00-12:00		
11	29/10/2024	22/10/2024	27/10/2024	<u>Tutorial</u> Peripartum health & breastfeeding counseling	Dr. Hafsa Raheel
	2:00-3:00	3:00-4:00	2:00-3:00		
	31/10/2024 2:00-3:00			<u>Seminar</u> School Health Services	Dr. Lamia Alqahtani
12	06/11/2024	30/10/2024	07/11/2024	<u>Lecture</u> Introduction to Health Policy	Dr. Hani Alghamdi
	10:00-11:00	9:00-10:00	11:00-12:00		
	07/11/2024 2:00-3:00			<u>Seminar</u> Substance Use	Dr. Faris Alharbi
14	19/11/2024	05/11/2024	17/11/2024	<u>Lecture</u> Health Education and Counseling	Dr. Rufaidah Dabbagh
	2:00-3:00	3:00-4:00	1:00-2:00		
	21/11/2024 3:00-4:00			<u>Seminar</u> Geriatrics Health	Dr. Walid Kreidy
	*WEEK 13 – FALL Vacation (from 10/11/2024 until 14/11/2024)				
15	25/11/2024	19/11/2024	19/11/2024	<u>Lecture</u> CVD: Prevention and Control	Dr. Leena Baghdadi
	10:00-11:00	11:00-12:00	9:00-10:00		
16	02/12/2024	27/11/2024	01/12/2024	<u>Lecture</u> Lifestyle Medicine (Modifiable risk factors)	Dr. Mohammed Almansour
	2:00-3:00	1:00-2:00	2:00-3:00		
	04/12/2024	27/11/2024	03/12/2024	<u>Tutorial</u> Lifestyle Medicine	Dr. Mohammed Almansour & Dr. Afnan,
	11:00-12:00	2:00-3:00	10:00-11:00		
17	10/12/2024	01/12/2024	10/12/2024	<u>Tutorial</u> Counseling Chronic Diseases	Dr. Leena & Dr Armen
	8:00-9:00	11:00-12:00	10:00-11:00		
	09/12/2024	02/12/2024	10/12/2024	<u>Lecture</u> Diabetes Prevention and Control	Dr. Hafsa Raheel
	1:00-2:00	2:00-3:00	9:00-10:00		
18	11/12/2024	12/12/2024	15/12/2024	<u>Lecture</u> Prevention & Control I	Dr. Hani Alghamdi
	1:00-2:00	2:00-3:00	9:00-10:00		
	11/12/2024	12/12/2024	19/12/2024	<u>Lecture</u> Prevention & Control II	Dr. Hani Alghamdi
	2:00-3:00	3:00-4:00	11:00-12:00		
19	18/12/2024	18/12/2024	17/12/2024	Lecture Communicable respiratory disease	Dr. Afnan Younis
	1:00-2:00	2:00-3:00	10:00-11:00		
	18/12/2024	18/12/2024	17/12/2024	<u>Lecture</u> Zoonotic disease and one health	Dr. Kholood Altassan
	2:00-3:00	10:00-11:00	11:00-12:00		

	*Week 19: 22/12/2024 to 26/12/2024 – EXAMINATION WEEK				
	*Weeks 20: 29/12/2024 - 02/01/2025 – MID-YEAR VACATION				
	07/01/2025	07/01/2025	06/01/2025	Lecture	Dr. Afnan Younis
24	2:00-3:00	3:00-4:00	8:00-9:00	Vector borne Disease	
	09/01/2025	09/01/2025	12/01/2025	Lecture	Dr. Rufaidah Dabbagh
	2:00-3:00	3:00-4:00	8:00-9:00	Food borne diseases	
25	13/01/2025	15/01/2025	12/01/2025	Lecture	Dr. Basmah Almujaadadi
	3:00-4:00	9:00-10:00	1:00-2:00	Mental Health	
	16/01/2025			Seminar	Dr. Ayna Alsharidi
	3:00-4:00			HIV and AIDS	
26	23/01/2025	22/01/2025	22/01/2025	Lecture	Dr. Armen Torchyan
	11:00-12:00	2:00-3:00	9:00-10:00	Outbreak investigation	
	23/01/2025	22/01/2025	23/01/2025	Lecture	Dr. Kholood Altassan
	1:00-2:00	3:00-4:00	9:00-10:00	Environmental health	
	28/01/2025	26/01/2025	30/01/2025	Lecture	Dr. Kholood Altassan
	2:00-3:00	11:00-12:00	10:00-11:00	Occupational health	
27	28/01/2025	26/01/2025	30/01/2025	Lecture	Dr. Kholood Altassan
	3:00-4:00	1:00-2:00	11:00-12:00	Climate and Health	
29	02/02/2025	02/02/2025	04/02/2025	Tutorial	Dr. Afnan, Dr. Armen
	11:00-12:00	10:00-11:00	10:00-11:00	Outbreak Investigation	
	05/02/2025	05/02/2025	06/02/2025	Lecture	Dr. Marwa Hassounah
	9:00-10:00	10:00-11:00	10:00-11:00	Heat Related Injuries	
30	09/02/2025	09/02/2025	11/02/2025	Consulting on Poster Presentations	Assigned supervisor
	9:00-10:00	1:00-2:00	10:00-11:00		
	26/02/2025	16/02/2025	25/02/2025	Consulting on Poster Presentations	Assigned supervisor
	9:00-10:00	1:00-2:00	10:00-11:00		
34	03/03/2025	03/03/2025	05/03/2025	Lecture	Dr. Marwah Hassounah
	1:00-2:00	3:00-4:00	2:00-3:00	Public health communication	
	03/03/2025	02/03/2025	06/03/2025	Tutorial	Dr. Hafsa, Dr. Marwah
				Travel Medicine Counseling	
35	11/03/2025	10/03/2025	13/03/2025	Lecture	Dr. Haytham Alsaif
	10:00-11:00	2:00-3:00	10:00-11:00	Cancer: Prevention & control	
	11/03/2025	10/03/2025	13/03/2025	Tutorial	Dr. Haytham & Dr. Leena
	11:00-12:00	3:00-4:00	11:00-12:00	Counselling Cancer	
	WEEKS 31 TO 33: EID AL FITR HOLIDAYS (FROM: 16/03/2025 TO 03/04/2025)				
36	10/04/2025			Seminar	Dr. Anas Khan
	2:00-3:00			Mass gathering/Disaster medicine	
37	07/04/2025	07/04/2025	10/04/2025	Lecture	Dr. Nurah Alamro
	1:00-2:00	2:00-3:00	10:00-11:00	National & Global Health Policies & Regulations	
	13/4/2025			Seminar	Dr. Saleh Alessy
	3:00-4:00			Cancer in the Kingdom of Saudi Arabia	
	17/04/2025			Seminar	Prof. Lubna Alansari
	1:00-2:00			Global Health Organization	

	OSCE and Poster Presentation
	*Week 39 – Consolidation Week (11/05/2025 until 15/05/2025)
	*Weeks 40 and 41: Examination Weeks (18/05/2025 until 29/05/2025)