

Course Code MED-305	Course Title Integrated Clinical Practice III	ECTS Credits 6
School Medical School	Semester Fall (Semester 5)	Prerequisites MED-205 Integrated Clinical Practice I MED-210 Integrated Clinical Practice II
Type of Course Required	Field Medicine	Language of Instruction English
Level of Course Undergraduate	Year of Study 3rd	Course Lead Dr Evie Vassiliou
Mode of Delivery Face-to-face	Work Placement Clinical Visits	Co-requisites None

Objectives of the Course:

This is the third Integrated Clinical Placement course that students will undertake. The aim is for students build on the clinical and communication skills learnt in MED-205 and MED-210.

They will practise further clinical and communication skills related to the courses running concurrently, initially on each other and subsequently on selected patients in the community.

Communication Skills: Students, in small groups, will learn the basic principles of patient doctor communication, and will learn how to gather information from a patient and how to give information to a patient.

Clinical Skills: Students, in small groups, will practise some of the basic aspects of clinical skills in medicine using mannequins. All clinical examinations will be peer examinations i.e. the students will be examining each other.

Clinical Placements: Students will attend two clinical placements on **coronary artery disease and asthma**.

Workshops: Students will attend three workshops on **coronary artery disease, cardiac arrhythmias and asthma**.

In addition to the above additional lectures and tutorials will be scheduled to enhance the learning experience and to re-visit some topics covered in years 1 and 2 (spiral learning). These sessions will be in the areas of **age related findings, professionalism, medical psychology, medical ethics, medical sociology and research methods**.

Learning Outcomes:

The following list provides the learning objectives that will be covered in sessions of each week:

Week 1

LOBs covered during communication skills sessions:

1. Identify the importance of lay health beliefs in medical consultations

2. Identify the importance of cultural competence in medical consultations
3. Practice appropriate communication skills and cultural competence to elicit a history from a patient

LOBs covered during clinical skills sessions:

4. Revise the importance of sharps safety.
5. Revise the needle stick injury protocol.
6. Practise insertion of an IV cannula into a mannequin.

Additional lectures, tutorials and workshops:

'Patient safety'- Lecture

(Professionalism -Dr Paola Nicolaidis).

LOBs:

7. Describe and analyse the causes of medical error and threats to patient safety.
8. Outline and discuss individual and organisational strategies used to optimise patient safety.

Week 2

Additional lectures, tutorials and workshops:

'Adulthood: Normal physical changes' -Lecture

(Age related findings - Dr George Athanasiou)

LOBs:

9. Describe normal physical changes associated with adulthood.

'Adulthood: Developmental stages' -Lecture

(Age related findings - Dr George Athanasiou)

LOBs:

10. Describe developmental stages associated with adulthood.

'Adulthood: Lifestyle and routine preventive care' -Lecture

(Age related findings - Dr George Athanasiou)

LOBs:

11. Describe the role of lifestyle in the prevention of diseases and in the promotion of a longer period of good health in adults.
12. Explain how preventive measures and screening can be used to achieve a longer period of good health in adults.

'Adult abuse I & II' - Lectures

(Psychology - Dr Stelios Georgiades)

LOBs:

13. Outline the different types of abuse in adults.
14. Describe the psychological impact of abuse in adult victims.
15. Describe available psychological treatment and interventions for adult victims.

Week 3

LOBs covered during communication skills sessions:

16. Identify how patients experience their chronic illness and how their biography is affected.
17. Identify the necessary communication skills in order to take history from a chronic patient with multiple sclerosis.

18. Practise appropriate skills to take history from a patient with multiple sclerosis.

LOBs covered during clinical skills sessions:

19. Discuss the indications and contraindications for ABG sampling.
20. Discuss and perform Allen's test.
21. Practise taking an ABG from a mannequin.
22. Discuss how to interpret an ABG.

Week 4

No sessions.

Week 5

LOBs covered during integrated clinical and communication skills session:

23. Understand the steps needed to discuss informed consent with a patient potentially undergoing catheterisation.
24. Observe/practice and gain experience in explaining the procedure of catheterisation to a patient.
25. Practice communication with a patient who is undergoing a sensitive and painful examination.
26. Revise the importance of the aseptic technique and the steps of urinary catheterisation.
27. Practice/observe male urethral catheterisation on a model

Additional lectures, tutorials and workshops:

'Survival analysis: Kaplan-Meier curves and Hazard Ratios'-2 Lectures and 1 Tutorial (Research Methods - Dr Alexandros Heraclides)

LOBs:

28. Interpret Hazard Ratios and related 95% Confidence Intervals. (Research methods Lecture 1).
29. Distinguish between Hazard Ratios, Risk Ratios and Odds Ratios and decide which to use for the appropriate research scenario. (Research methods Lecture 1).
30. Describe time to event (survival) data and how they are used to calculate conditional and cumulative survival probabilities. (Research methods Lecture 2)
31. Interpret a Kaplan-Meier Survival curve. (Research methods Lecture 2).
32. Compare treatment groups and exposure categories for a given outcome using Kaplan-Meier Survival curves. (Research methods Lecture 2).
33. Calculate and Interpret Hazard Ratios for the association between exposures and outcomes. (Research methods Tutorial).
34. Interpret Hazard Ratios (95% Confidence Intervals) and Kaplan-Meier Survival curves from published research studies. (Research methods Tutorial)

Week 6

LOBs covered during integrated clinical and communication skills session:

35. Practice obtaining consent for intimate examination as a medical student.
36. Integrate appropriate communication skills to address challenges that may arise during an intimate examination.
37. Identify what relevant questions need to be gathered when taking a focused breast history.
38. Perform/Observe a systematic breast examination

39. Present the findings to the supervising doctor during the examination while the patient is present.

Week 7

LOBs covered during integrated clinical skills session:

40. Practise the setup of a 12 lead ECG on a colleague.
41. Check that the 12 lead ECG is technically correct and ready for interpretation.

Workshop on Coronary Artery Disease (Dr George Athanasiou)

PTS on Coronary Artery Disease

LOBs covered during workshop and clinical placement on Coronary Artery Disease:

42. Define Coronary Artery Disease (CAD).
43. Discuss the risk factors for developing CAD.
44. Take a focused cardiovascular history.
45. Perform a cardiovascular examination.
46. Offer differential diagnosis.
47. Suggest relevant investigations for diagnosing CAD.
48. Discuss the management of a patient with CAD in primary care.
49. Discuss primary and secondary prevention of cardiovascular diseases.

Week 8

LOB covered during clinical skills session:

50. Revise the CVS examination on a colleague.

Additional lectures, tutorials and workshops:

'Detailed design and analysis of clinical trials: intention to treat analysis, cross-over trials, relative risk reduction, number needed to treat'

(Research Methods - Dr Alexandros Heraclides)-2 Lectures and 1 Tutorial

LOBs:

51. Compare and contrast the parallel and the cross-over design in clinical trials, highlighting the strengths and limitations of each. (Research methods Lecture 1).
52. Discuss the importance of the concepts of randomization, blinding, and placebo in the design of clinical trials. (Research methods Lecture 1).
53. Compare and contrast Intention to Treat Analysis (ITT) and per protocol analysis in clinical trials. (Research methods Lecture 2).
54. Explain Absolute Risk Reduction (ARR) and Absolute Risk Increase (ARI), and discuss their importance in the analysis of clinical trials. (Research methods Lecture 2).
55. Explain the Number Needed to Treat (NNT) and Number Needed to Harm (NNH), and discuss their importance in the analysis of clinical trials. (Research methods Lecture 2).
56. Describe the analysis of parallel and crossover trials with binary and numeric outcomes. (Research methods Lecture 2).
57. Critically evaluate the design of published clinical trials and be able to design a simple clinical trial. (Research methods Tutorial).
58. Calculate and Interpret the Absolute Risk Reduction (ARR), Absolute Risk Increase (ARI), Number Needed to Treat (NNT), and Number Needed to Harm (NNH).

(Research methods Tutorial).

'Family and cultural factors, including socioeconomic status, ethnicity, and gender'
(Sociology - Dr Costas Constantinou) –Lecture

LOB:

59. Apply sociological principles to explain a case of a cardiovascular condition.

Week 9

Additional lectures, tutorials and workshops:

'Basic Introduction to ECGs'
(Dr Petros Petrou) –Lecture

LOBs:

60. Recognise the components of a normal ECG (ECG Lecture).
61. Recognise the normal ranges in an ECG (ECG Lecture).
62. Discuss the basic interpretation of a 12 lead ECG (ECG Lecture).

Workshop on Cardiac Arrhythmias
(Dr George Athanasiou)

LOBs:

63. Define the term arrhythmia and its presentation in primary care.
64. Recognize Atrial Fibrillation in primary setting.
65. Take a history and perform a clinical examination in a patient with arrhythmia.
66. Discuss the differential diagnosis of a patient in primary care with heart palpitations.
67. Discuss the basic management of Atrial Fibrillation in primary care.

Week 10

LOBs covered during communication skills sessions:

68. Identify the key clinical communication skills which are necessary to communicate effectively with older persons
69. Identify the importance of stereotypes in medical consultations
70. Identify the health and social profile of the elderly
71. Demonstrate through role-play the appropriate skills for structuring the consultation, building rapport, and gathering information

Week 11

LOBs covered during clinical skills sessions:

72. Revise the respiratory examination on a colleague.

Additional lectures, tutorials and workshops:

'Death and dying' -Lecture
(Ethics - Dr Julia Hynes)

LOB:

73. Discuss the ethical and legal issues around death and dying in clinical practice.

'Ethics of managed care' - Lecture
(Ethics - Dr Julia Hynes)

LOB:

74. Discuss the ethical issues concerning managed care in clinical practice.

Elder abuse I & II'
(Psychology - Dr Stelios Georgiades)

LOBs:

75. Outline the different types of abuse in the elderly.
76. Describe the psychological impact of abuse in the elderly.
77. Describe available psychological treatment and interventions for the elderly.

Week 12

LOB covered during lecture:

78. Explain the consent process to which a clinician must adhere before an operative procedure.

LOBs covered during integrated clinical and communication skills sessions:

79. Understand the steps needed to discuss informed consent with a patient potentially undergoing gastroscopy or colonoscopy.
80. Observe/practice and gain experience in explaining the procedure of gastroscopy or colonoscopy to a patient.
81. Practice communicating with a patient who is undergoing a sensitive and painful examination.
82. Discuss what the information involves and the indications of the procedure.
83. Give instructions for the preparation needed prior to and after the procedure.

Additional lectures, tutorials and workshops:

'Senescence: Normal physical changes'-Lecture
(Age related findings-Dr Kyriakos Adamou)

LOBs:

84. Explain the difference between 'normal ageing' and pathological changes.
85. Describe the changes that occur in different organ systems as a result of aging.

'Senescence: Lifestyle and routine preventive health care' -Lecture
(Age related findings-Dr Kyriakos Adamou)

LOBs:

86. Describe the role of lifestyle in the prevention of diseases and in the promotion of a longer period of good health as we get older.
87. Explain how preventive measures and screening can be used to achieve a longer period of good health as we get older.

Specific Workshop on Asthma
(Dr George Athanasiou)

LOBs covered during workshop and clinical placement (PTS) on asthma:

88. Provide a summary of the basic principles of asthma management in primary care.
89. Take a respiratory history and perform a respiratory examination.

90. Provide differential diagnosis for an asthma attack.
91. Provide appropriate management for asthma.
92. Understand the key actions of early recognition and management of severe asthma in primary care.

LOBs covered during communication skills review session:

93. Identify areas of clinical communication that have been covered that need improvement.
94. Revise the skills that could help refine the areas that need improvement.

LOBs covered during clinical skills review sessions:

95. Identify areas of clinical skills that have been covered that need improvement.

Course Contents:

Topics covered in communication skills:

- Information Gathering/ Giving: Cultural Competence - Health Beliefs
- Information Gathering/ Giving: Multiple Sclerosis
- Catheters (Communication & Clinical Skills Integrated Session)
- Breast Integrated (Communication & Clinical Skills Integrated Session)
- Communicating with the elderly I
- Pre – operative communication / consent - Lecture
- Integrated communication and clinical skills explanation of procedures e.g. colonoscopy, gastroscopy.

Topics covered in clinical skills:

- IV cannulation
- Arterial blood gases
- Catheters (Communication & Clinical Skills Integrated Session)
- Breast Integrated (Communication & Clinical Skills Integrated Session)
- ECGs technical
- Revision CVS
- Revision Respiratory
- Pre – operative communication / consent - Lecture
- Integrated communication and clinical skills explanation of procedures e.g. colonoscopy, gastroscopy.

Topics covered in other lectures and tutorials:

- Patient safety
- Adulthood: Normal physical changes
- Adulthood: Developmental stages
- Adulthood: Lifestyle and routine preventive health care
- Adult abuse
- Survival analysis: Kaplan-Meier curves and Hazard Ratios
- Detailed design and analysis of clinical trials: intention to treat analysis, cross-over trials, relative risk reduction, number needed to treat.
- Family and cultural factors, including socioeconomic status, ethnicity, and gender
- Basic Introduction to ECGs

- ECG Case Studies
- Death and dying
- Ethics of managed care
- Elderly abuse
- Senescence: Normal physical changes
- Senescence: Lifestyle and routine preventive health care

Workshops:

- Coronary Artery Disease.
- Cardiac Arrhythmia (specific workshop).
- Asthma.

Clinical Placements: 2 Protected Time Sessions (PTS)

- PTS on Coronary Artery Disease.
- PTS on Asthma.

Learning Activities and Teaching Methods:

The course is delivered through small group teaching in both clinical and communication skills.

Communication skills: small group teaching, group discussions, role playing.

Clinical skills: small group teaching, demonstration of examination techniques, and examinations on peers, practising and performing the skills on mannequins.

Clinical Placements: There would be 2 clinical placements during this semester where students will get to see patients under supervision. There would be two protected time specific sessions (PTS).

Lectures, tutorials and workshops: In addition to the sessions shown above, lectures, tutorials and workshops will be scheduled in the fields of **age related findings, professionalism, medical psychology, medical ethics, medical sociology and research methods.**

Assessment Methods:

Clinical placements attendance and professional behaviour (10%)
 Final examination (20%)
 End of semester OSCE (70%).

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Silverman J, Kurtz S, Draper J.	Skills for communicating with patients	Radcliffe Medical Press 3 rd Edition	2013	9781846193651
Douglas, Graham (ed.)	Macleod's clinical examination	Elsevier Churchill	2013	9780702047282

		Livingstone 13 th Edition		
Khan, H et al.	OSCEs for Medical Finals	Blackwell, Oxford 1 st Edition	2013	9780470659410

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Talley and O'Connor	Clinical examination: a systematic guide to physical diagnosis	Churchill Livingstone/ Elsevier 7 th Edition	2013	9780729541473