| Course title | Clinical Practice: General Surgery | | | | | |
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| Course code | GEMD-501 | | | | | |
| Course type | Required | | | | | |
| Level | Undergraduate | | | | | |
| Year / Semester | Year 5/ Semester 9/10 (rotation) | | | | | |
| Teacher's name | Course Lead: TBA | | | | | |
| ECTS | 48 | Teaching Periods per Week | | | | |
| | | Large Group Learning | Small Group Learning | Clinical Practice | | |
| | | 6 | 2 | 30 | | |
| | The main objectives of the last two years of the five-year medical programme are to provide students with extensive experience in the clinical environment, mainly in hospitals but also in the community, so that they can utilise their learning over the previous three years to practise their clinical, communication, diagnostic and reasoning skills on real patients, and to learn about the management of patients, from a medical, therapeutic, surgical, psychosocial and caring perspective. In this course, students will spend six weeks working with patients who present with a surgical problem across any sub-specialty of surgery. They will develop an understanding of the presentation, signs and symptoms, physical examination findings, investigations, diagnosis, treatment (medical and surgical) and management plan for a wide range of conditions. | | | | | |
| Course purpose and objectives | Students will be "on call" in the Emergency Room to receive and clerk patients. They will spend most of their time on wards, in theatre and in outpatient clinics. They will try to follow their patients throughout their treatment to build up some continuity of care. They will take part in all ward activities, working alongside other doctors, nurses, physiotherapists, occupational therapists, pharmacists, social workers – any healthcare professional involved in patient care – in order to understand the roles each healthcare professional undertakes and the importance of teamwork. They will take histories (clerking), carry out physical examinations, suggest investigations and interpret the findings with a view to reaching a diagnosis and starting treatment. They will take part in ward rounds, team meetings, theatre sessions, radiology, and pathology meetings and will present their patients to the rest of the team. They will keep accurate records (using an agreed template). The overall aims of the attachment are as follows: To gain experience of patient care as part of a clinical team. To become proficient in diagnosis and formulation of management plans. | | | | | |
| | • To gain e | experience of patient ca | re as part of a clinical t | | | |

- To develop an adequate knowledge base for understanding common problems in general surgery.
- To practise basic surgical skills, such as hand-washing, gowning and gloving, and to observe (and take part, if appropriate) in operations and other surgical procedures.
- To learn about anaesthetics and airway management during their time in theatre.
- To prepare students to be able to prescribe drugs safely upon completion of their course.
- To ensure students are able to write prescriptions and fill out drug charts accurately.
- To ensure students are able to inject drugs, at the correct dose, intramuscularly, subcutaneously and intravenously.
- To develop clinical reasoning and problem-solving skills at the bedside, in outpatients and in theatre.
- To develop high standards of professional behaviour.
- To continually reinforce basic and clinical science principles learnt during the earlier part of the course.

By the end of the course, students will be able to:

- 1. Take a competent history from a patient, or relative of a patient, presenting with a condition requiring surgical intervention, in a sensitive and caring manner.
- 2. Carry out a physical examination of patients.
- 3. Discuss a differential diagnosis for the presenting complaint.
- 4. Apply their knowledge of basic and clinical science to identify and explain appropriate investigations, including blood, urine and faecal tests and imaging, cytology and biopsy to assist in the diagnosis of the presenting complaint and to interpret the results from such tests.
- 5. Prepare and explain a surgical treatment management plan for the patient to present to the responsible surgeon.
- 6. Apply clinical reasoning and problem-solving skills at the bedside, in outpatients and in theatre, using hypothesis generation, data gathering, integration of basic science, clinical medicine and evaluation of opinions.
- 7. Demonstrate knowledge of common surgical problems and surgical emergencies.
- 8. Perform procedures common to general surgery aseptic technique, scrubbing, gowning & gloving, suturing, use of local anaesthetic for suturing, removal of sutures and staples, freezing and cautery, endoscopic procedures (observed only), wound management, wound dressing and bandaging,

Learning outcomes

| | management of leg ulcers and burns, control of haemorrhage, airway maintenance, bag and mask, resuscitation, venepuncture, insertion of intravenous cannulae, arterial puncture, urinary catheter, setting up an intravenous fluid infusion, administration of an intravenous injection, intramuscular injection, subcutaneous injection, administration of oxygen, diagnosis of death, male and female urinary catheterization. | | | | | | | |
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| | Prescribe drugs safely a. Demonstrate how to write a prescription for a patient, including effective prescription of controlled drugs. | | | | | | | |
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| | b. Demonstrate the correct use of an in-patient prescription chart. c. Inject drugs, at the correct dose, intramuscularly, subcutaneously and intravenously. d. Correctly prescribe oxygen, "As Required" medication, fluids and blood products, under supervision. | | | | | | | |
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| | 10. Mix and inject drugs into an intravenous infusion bag and prepare and give drugs by infusion pump. | | | | | | | |
| | 11. Demonstrate high professional standards and attitudes regarding relationships in the workplace, team work, confidentiality, initiative, self-directed learning and ethical issues. | | | | | | | |
| Prerequisites | None | Required None | | | | | | |
| Course content | The diagnosis and management of common acute and elective surgical conditions The diagnosis and management of surgical complications Clean and sterile technique Scrubbing, gowning and gloving Wound dressing and bandaging Suturing and removal of sutures and staples Infection control Freezing and cautery Insertion of tubes, drains, needles Interpretation of investigations – X-rays, CT scans, MRI scans, ultrasound, Doppler and duplex scans, blood tests, pathology Emergency medicine skills – airway maintenance etc. Prescribing Skills Management of fluids and electrolytes Postoperative pain control Gaining informed consent Explaining procedure to patient | | | | | | | |
| Teaching methodology | The course is delivered by clinical placements and associated lectures. Time is allocated during the week for discussions and self-directed learning. | | | | | | | |

| | Required textbooks/reading | | | | | | | |
|--------------|--|---|-----------------|---|------------------|---------------|--|--|
| Bibliography | Authors | Title | Edition | Publisher | Year | ISBN | | |
| | Brunicardi, F. Charles | Schwartz's principles of surgery | 9 th | McGraw-Hill | 2010 | 9780071547703 | | |
| | Raftery, Andrew T. | Applied basic science for basic surgical training | | Churchill Livingstone Elsevier | 2008 | 9780080451404 | | |
| | Joint Formulary Committee | https://bestpracti ce.bmj.com/drugs | Last one | BMJ Group and Pharmaceu tical Press. | Current year | | | |
| | National Institute for Health and Clinical Excellence | https://www.nice. org.uk/guidance | Last one | | Current year | | | |
| | Recommended textbooks/reading | | | | | | | |
| | Authors Goldberg, Andrew. | Title Surgical talk: lecture notes in undergraduate surgery | Edition | Publisher Imperial College Press | Year 2012 | 9781848166141 | | |
| Assessment | Final year exam and final year OSCE. The written assessment will be Single Best Answer MCQs and Short Answer Questions. Workplace based assessments will take place during the attachment. | | | | | | | |
| Language | English | | | | | | | |