

**REGULATIONS AND SYLLABUS
FOR
POST GRADUATE DIPLOMA IN GASTROENTEROLOGY HEALTH
CARE MANAGEMENT**

Offered by

**BHARATHIAR UNIVERSITY, COIMBATORE
FROM 2009-2010**

Under The

**CENTRE FOR COLLABORATION OF
INDUSTRY AND INSTITUTIONS (CCII)
COLLABORATIVE PROGRAMME**

POST GRADUATE DIPLOMA IN GASTROENTEROLOGY HEALTH CARE MANAGEMENT

Course Title and Summary

The course shall be called the “**POST GRADUATE DIPLOMA IN GASTROENTEROLOGY HEALTH CARE MANAGEMENT**”

It will be an intensive full time course, which will include mainly practical training in the medical and surgical department of gastroenterology namely Out patient department, surgical and medical ward, surgical and medical ICU/HDU, Endoscopic room and Operation theatre apart from bedside classes and lectures.

At the end of the course the candidate will be familiar with the nursing care of all the surgical and medical gastroenterology cases and managing routine diagnostic endoscopic and colonoscopic procedural cases. They will acquire enough knowledge about the pathology and microbiology of the GI disorders and obesity. They will also get trained in ICU care of post operative GI surgical and bariatric surgical patients.

The programme will be conducted in a hospital recognized by the Bharathiar University under the CCII collaborative programme. Candidates shall abide by the stipulated timings, discipline, rules and regulations of the hospital to which they will be assigned for the entire course.

REGULATIONS

1) Eligibility for admission

The candidates those who have passed 3 years Diploma in Nursing after +2 examination or B. Sc Nursing of recognized university or equivalent be eligible for admission to Post Graduate Diploma in Gastroenterology Health Care Management course.

2) Course Duration:

The duration shall be 12 months Full Time. The candidates admitted to this course would spend at least six hours a day and 30 hours per week in the Bharathiar University Recognized Hospitals.

3) Course of study and scheme of Examinations

The period of certified study for the POST GRADUATE DIPLOMA IN GASTROENTEROLOGY HEALTH CARE MANAGEMENT shall be a full time course and its duration shall extend over a period of one academic year (non-semester). There shall be one examination at the end of the course, which will consist of theory, practical and oral components.

SCHEME OF EXAMINATION

Paper No.	Subject	Credit Hours	Max Marks	
			Int	Ext
01	Applied Basic Sciences	6	60	90
02	Applied Pathology and Microbiology	6	60	90
03	Clinical & preventive gastroenterology	6	60	90
04	GI nursing care and stoma care	6	60	90
05	Gastroenterology ICU/HDU Care and Diagnosticendoscopic Nursing Care (Practical)	6	60	90

4) Practical Training

The candidate admitted to the course shall be put through a total of 900 hours of intensive practical and clinical training in the hospital medical and surgical OPD, ward, OT and ICU/HDU, in order to gain a thorough understanding of nursing care of various GI disorder patients . Also they will acquire adequate knowledge in handling patients in the endoscopic rooms, ward and ICU apart from knowing various endoscopic and colonoscopic instruments, procedures they will also know to assist minor laparoscopic surgeries in OT. Also should know about operation room setup and sterilization.

5) Requirement to appear for the examination

A candidate should put in a minimum of 90% attendance to be eligible to appear for the examinations.

6) Medium of instruction:

The medium of instruction throughout the course and the examinations shall be conducted in English only.

7) Passing Minimum

To pass, a candidate shall secure a minimum of 50% percent marks individually in the practical and Theory Examinations. A candidate failing in any one component will have to reappear for that particular component in the semester examination.

8) Classification of successful candidates

A candidate securing 75% and above, aggregate in the theory and practical examinations, in the first attempt, shall be deemed to have passed the examination with distinction.

A candidate securing 60% and above aggregate in the theory and practical examinations, in the first attempt, shall be deemed to have passed the examination with first class.

Other successful candidates shall be declared to have passed the examination in Second Class.

9) Conferment of degree.

A candidate, who has passed all the examinations as prescribed, shall be eligible to receive the degree of “Post Graduate Diploma in Gastroenterology Health Care Management” from the Bharathiar University.

10) Ranking

Candidates who have passed all the examinations in the very first attempt and securing the first position in aggregate marks for every 10 candidates appearing in the examinations ranking (with the maximum of 10 positions) will be awarded university ranks.

11) Revision of regulations and syllabus.

The syllabus and regulations of the course are subject to modification by the concerned board every year.

12) Question paper pattern.

Theory examination will be for 90 marks with the following components.

- Multiple choice / one word answers : $15 \times 1 = 15$ marks (no choice)
- Short notes (100 words/ one paragraph) : $5 \times 5 = 25$ marks (either/or type)
- Elaborate (300 words or 1½ paper) : $5 \times 10 = 50$ marks (either/or type)

Award of Internal Assessment Marks

Internal assessment marks for theory will be awarded based on the Marks obtained in the three Internal Assessment Tests and based on the candidate’s regular performance in the practical area and one practical exam marks.

PAPER 1
APPLIED BASIC SCIENCES

Aim: At the end of the course, the candidate should have a thorough knowledge of the structural and functional aspects of the human gastrointestinal systems.

Unit: 1

Applied GIT anatomy I: Anatomy of the esophagus, stomach, duodenum, small bowel.

Unit: 2

Applied GIT anatomy II: Anatomy of abdomen, omentum, colon, rectum and anal canal.

Unit: 3

Applied GIT Physiology I: Mechanism of stomach and intestinal secretion. Function of stomach, duodenum and gallbladder.

Unit: 4

Applied GIT physiology II: function of liver, spleen, colon and rectum. Physiology of defecation.

REFERENCE BOOKS:

1. Williams PL, Warwick R, Dyson M, Bannister LH (eds) Gray's Anatomy. 36th edition. Churchill Living stone, New York, 1980.
2. Human anatomy Regional and applied Volume – 1 - B.D Chaurasia's, 3rd CBS Publishers and distributions New Delhi, 1995.
3. Text book of Medical Physiology - Arthur C. Guyton, John E. Hall, 9th edition W.B.
4. Saunders Company U.S.A 1996.
5. Essentials of Medical physiology - Anil Baran singha mahapatra, 1st edition current Books international Mumbai. 1998.
6. Clinical Anatomy for Medical students - Richard s. Snell, 5th edition Little, Brown and company. U.S.A 1992.

PAPER 2
APPLIED PATHOLOGY AND MICROBIOLOGY

Aim: At the end of the course, the student should know about the pathogenesis and detailed pathology of the various diseases affecting the gastro intestinal systems. The students should also know about the various types of organisms affecting the gastrointestinal tract and in the ER and OR set up.

Unit: 1

General lectures on micro-organisms- Classification/ shapes/

Unit: 2

Sterilisation and asepsis.

Unit: 3

Infection- source of infection, , spread of infection, various pathogenic bacteria, viruses and diseases caused by them (gastritis, enteritis, enterocolitis,colitis, etc)

Unit: 4

Pathology – General- Cell injury and adaptation, inflammation and repair, fluid and hemodynamic derangement in vomiting and diarrhoea.

Unit: 5

Pathology of the gastrointestinal tract and genital system. IBS, IBD, Koch's abdomen.

REFERENCE BOOKS:

1. Fletcher: Diagnostic Histopathology of Tumours – Christopher DM Fletcher 2007 (3rd edition)
2. Lakhani: Basic Pathology: An Introduction to the Mechanisms of Disease – Sunil R
3. Lakhani, Susan A Dilly, Caroline J Finalyson and Ahmet Dogen 2003 (3rd ed),
4. Appleton & Lange's Review of Microbiology & Immunology – Dr William W Yotis,
5. Tadayo Hashimoto, Harnold J. Blumenthal – 1997.
6. 4. Medical Microbiology – Michael A. P Faller, Patrick R.Murray, Ken S. Rosenthal – 2005.

PAPER 3
CLINICAL AND PREVENTIVE GASTROENTEROLOGY

OVERALL OBJECTIVE: At the end of the course the students will be able to acquire knowledge on the basic concepts of preventive gastroenterology and clinical gastroenterology and develop desirable skill and attitude in providing necessary care to the patient before, during and immediately after diagnostic endoscopic and colonoscopic procedures. They will also acquire enough knowledge about the clinical presentation of common GI disorders and will know about the prevent aspects for GI cancers and obesity. Should also develop to classify obesity according to their BMI.

SPECIFIC OBJECTIVES:

The students will be able to

1. Classify various upper and lower GI disorder according to their history and clinical presentation.
2. Prepare BMI for the obesity patients
3. Assist the clinician during examination of the patients.
4. Assist the endoscopist in the endoscopy room.
5. prepare the patient before laparoscopic surgery and other endoscopic procedure
6. handle all postop GI surgical cases and bariatric surgical cases in the ward
7. Maintain clean and sterile environment in endoscopic suite along with sterilisation of the endoscopy and colonoscopy

Unit: 1

Introduction to clinical gastroenterology; out patient department room Management- Organisation of Hospital - Organisation of instruments in the minor OT - helping the surgeon in the procedures like PR, Proctoscopy, Flatus tube insertion, dressing the wound, etc.

Unit: 2

Introduction to preventive gastroenterology; diet advise and exercise in prevention of obesity and other GI disorders. Basic knowledge about the drugs used in the clinical and preventive gastroenterology. Giving drug and diet advise to the patients with GERD and other functional disorders of GI tract. Advise to the patients with constipation and dysentery.

Unit: 3

Surgical Asepsis and Hygienic endoscopy Room: - Preparation of sterile field. - Preparation of tables, equipments, instruments for the procedure - Care of endoscopy room – before, during & after the procedure –Special Precaution in handling patients with sepsis, blood borne infection – Hep.B, HCV, HIV etc - Cleaning and disinfection of the articles and endoscopy room (with special reference to HIV, HBV & HCV)Terminal disinfection of endoscopy room.

Unit: 4

Endoscopy Room equipments, Instruments and Maintenance: Basic endoscopy unit – forward viewing, single channel and double channel endoscopy and Specific instruments used in endoscopic and colonoscopic procedures.

Unit: 5

Diagnostic endoscopic procedure- giving oral anaesthetic agent, preparation of patient including transfer & positioning of the patient. Diagnostic colonoscopic procedure- Assisting the anesthesiologist for induction of anaesthesia and positioning the patient.

REFERENCE BOOKS:

1. 1.Sleisenger & Fordtran's Gastrointestinal and Liver Disease, 8th ed.
2. 2.Practical gastrointestinal endoscopy the fundamentals – Peter B Cotton
3. Introduction to Operating room Technique - Kandaswami
4. Fundamentals of Operation Theatre Service - T.K.Datta
5. SAGES manual perioperative care in minimally invasive surgery. Richard I. Whelan, James w. fleshman, Dennis L. fowler. Springer edition.
6. A.Alice, A.Jebamani and C.Accamma (2004) clinical Nursing Procedure Manual, 2nd ed B.I. Publications, Bangalore
7. Sr.Nancy,(2000) Principles and Practice of Nursing, 3rd ed, N.R. Brothers, Indore
8. Nursing Education Society (1994), First Aid and Emergency Care, 4th ed, N.R.Brothers
9. Lewis; Medical and surgical nursing(2004)
10. Lin; advance practice in oncology nursing
11. Williams & Wilkins; quick look drug book
12. Lippincott; Nurses guide to clinical procedures
13. 13.Seldfridge- Thomas; emergency nursing.
14. Saunders; intensive care infection.
15. Deglin; Davis drug guide for nurses.

PAPER 4

GI NURSING CARE AND STOMA CARE

At the end of the course the students will be able to acquire knowledge on the basic concepts of gastroenterology nursing and will develop desirable skill and attitude in providing necessary care to the patient before, during and immediately after GI surgery.

Unit: 1

Nursing care in the ward- Bed making, Types of beds and various positions, Promotion of comfort, Rest and sleep hygienic needs – definition, factors influencing hygiene, Basic care – bath, back care, back massage, feet and nail, mouth care, eyes, ear and nose, hair care and pediculosis, treatment, prevention of bed sore, providing urinal / bed pan, perineal care and catheter care, bowel elimination, Enemas, Sitz bath, Suppository, Passing Flatus tube, Assisting the patients with vomiting, Diarrhoea and death care, Assisting the patient for feeding. vital signs- Checking the temperature, pulse and respiration, hot and cold applications – indication, contraindication and procedure.

Unit: 2

Nursing care in ICU/HDU- receiving and handling patients of UGI and lower GI bleed. Resuscitation and monitoring such patients. IV cannulation and catheterization. Introducing nasogastric tube and saline wash. Introducing and handling the sengstaken tube in severe UGI bleed. CVP monitoring. Handling the patients with hepatic encephalopathy and ascites. Handling patients with HBV, HCV and alcoholic hepatitis.

Unit: 3

Receiving and monitoring patients after major GI surgery and bariatric surgery. Wound care, drain care, mouth care, chest physio, preventing bedsore, etc. handling patients with severe acute pancreatitis. Sound knowledge about the ICU monitors and equipments. Getting experience in cardiopulmonary resuscitation and defibrillator.

Unit: 4

Handling the patients with ileostomy, colostomy and enterocutaneous fistula. Stoma care in the ward, OP and ICU/HDU. Thorough knowledge about the various ostomy kits available in the market. knowledge about its application and prevention of complication. Using stomahesive paste. convetec bag application. Wound manager application and management. Good communication skill and counselling the patients with stoma in the hospital and in the house. Having close touch with stoma group patients.

REFERENCE BOOKS:

1. Practical gastrointestinal endoscopy the fundamentals – Peter B Cotton
2. Sleisenger & Fordtran's Gastrointestinal and Liver Disease, 8th ed.
3. Introduction to Operating room Technique – Kandaswami
4. A. Alice, A. Jebamani and C. Accamma (2004) clinical Nursing Procedure Manual, 2nd ed B.I. Publications, Bangalore
5. Sr. Nancy, (2000) Principles and Practice of Nursing, 3rd ed, N.R. Brothers, Indore
6. Nursing Education Society (1994), First Aid and Emergency Care, 4th ed, N.R. Brothers

7. Fundamentals of Operation Theatre Service - T.K.Datta
8. SAGES manual perioperative care in minimally invasive surgery. Richard I. Whelan, James W. Fleshman, Dennis L. Fowler. Springer edition
9. Lewis; Medical and surgical nursing(2004)
10. Lin; advance practice in oncology nursing
11. Seldridge- Thomas; emergency nursing.
12. Saunders; intensive care infection

PAPER 5
PRACTICAL;GASTROENTEROLOGY ICU/HDU CARE AND
DIAGNOSTICENDOSCOPIC NURSING CARE

Clinical Postings in

Endoscopy room

ICU/HDU

Procedure to be completed

- Setting up of table for various diagnostic and therapeutic procedures
- Assisting the endoscopist in various endoscopic and colonoscopic procedures
- Handling the patients with GI bleed
- Applying sengstaken tube and monitoring CVP
- Observation & monitoring the patient in recovery room.
 - Handling the patients with hepatic encephalopathy
 - Handling post op GI surgery and bariatric surgery patients
 - Applying convatec bag and wound manager

At the end of the course student will be able to understand the technique of handling GI bleed patients and major post surgical patients. Also will be able to assist in resuscitation in emergency situation. Will be able to assist all diagnostic endoscopic and colonoscopic procedures..