



MEDICAL CODING

VALUE ADDED COURSE
For the academic year 2018-19

DEPARTMENT OF ZOOLOGY
CMS COLLEGE KOTTAYAM (AUTONOMOUS)
in association with
INTERNATIONAL INSTITUTE OF MEDICAL CODING





Course	Details				
Code	ZYA181603				
Title	Advanced Diploma in Medical Coding				
Degree	Undergraduate				
Branch(s)	Zoology				
Year/Semester	III/ V&VI				
Type	Add on course				
Credits	8	Hrs/Week	4	Total hours	144

<i>Objectives</i>	
1	To develop expertise in the various aspects of medical coding so as to compete with international arena to pursue their carrier
2	Strengthen the students to get job in reputed international organizations

CO No.	Expected Course Outcomes <i>Upon completion of this course, the students will be able to</i>	Cognitive Level	PSO No.
1.	Understand Anatomy and Physiology and explain the relationship between Anatomy and Physiology	U	3
2.	Analyze and synthesize their knowledge and skills to create effective anatomy teaching and learning tools	An	4
3	Understand the uniform reporting on claims or services that are medical in nature	U	4
4	Apply coding system to identify products, supplies and services	Ap	4
5	Apply anatomical terms to medical/surgical procedural coding.	Ap	4
7	Explain the use of General Equivalence Mappings (GEMS) in the coding transitions	U	4
*PSO-Program Specific outcome; CO-Course Outcome; Cognitive Level: R-Remember; U-Understanding; Ap-Apply; An-Analyze; E- Evaluate; C-Create			

<i>Teaching and Evaluation Methods</i>	
Teaching Methodology	Contact classes, ICT enabled teaching, Hands-on training Group discussions, Case studies, Field visit, workshops, Training in reputed institution in the concerned area
Evaluation Methodology	Written examination based on the syllabus, Practical and viva

Module	Course Description	Total Hrs	CO No.
1	Human Anatomy & Physiology	36	
1.1	Introduction to Body Structure and Medical Terminology	3hrs	1
1.2	Dermatology: The Skin	3 hrs	1
1.3	Ophthalmology: The Eyes	3 hrs	1
1.4	Otorhinolaryngology: The Ear, Nose, and Throat	3 hrs	1
1.5	Pulmonology: The Respiratory System	3 hrs	1
1.6	Cardiology: The Cardiovascular System	3 hrs	1
1.7	Gastroenterology: The Digestive System	3 hrs	1
1.8	Obstetrics and Gynecology: The Female Reproductive System	3 hrs	1
1.9	Urology and Nephrology: The Genitourinary System	3 hrs	1
1.11	Orthopedics: The Musculoskeletal System	3 hrs	2
1.12	Neurology and Psychiatry	3 hrs	2
1.13	Endocrinology and Metabolic Homeostasis	3 hrs	2
2	Healthcare Common Procedure Coding Systems (HCPCS)	36	
2.1	Introduction	1 hr	3
2.2	Symbols and Conventions	1 hr	3
2.3	Instructions for Using This Manual	1 hr	3
2.4	HCPCS Coding Procedures	1 hr	4
2.5	New/Revised/Deleted Codes for 2018	1 hr	3
2.6	Deleted Codes Crosswalk	1 hr	3
2.7	G Codes to CPT Codes	1 hr	4
2.8	Anatomical Illustrations	1hr	3

2.9	Index to Services, Supplies, Equipment, Drugs	1 hr	4
2.10	Tabular List	1hr	3
2.11	Transportation Service Including Ambulance	1hr	3
2.12	Medical and Surgical Supplies	1hr	3
2.13	Administrative, Miscellaneous and Investigational	1hr	4
2.14	Enteral and Parental Therapy	1hr	3
2.15	Outpatient PPS	1 hr	3
2.16	Durable Medical Equipment	1 hr	3
2.17	Procedures/Professional Services	1hr	3
2.18	Alcohol and Drug Abuse Treatment	1 hr	3
2.19	Drugs Administered Other than Oral Method	1hr	4
2.20	Chemotherapy Drugs	1hr	3
2.21	Durable medical equipment	1 hr	3
2.22	Orthotic Procedures	1 hr	3
2.23	Prosthetic Procedure	1.5hrs	3
2.24	Medical services	1.5 hrs	3
2.25	Pathology and laboratory services	1.5 hrs	3
2.26	Temporary Codes	1.5 hrs	4
2.27	Diagnostic Radiology	1.5 hrs	3
2.28	Temporary National codes	1.5 hrs	3
2.29	National Codes Established for State Medicaid Agencies	1.5 hrs	3
2.30	Vision Services	1.5 hrs	3
2.31	Hearing Services	1hr	3
2.32	Appendix A to I	1hr	3
3	Medical Coding Current Procedural Terminology(CPT)	36	
3.1	Introduction	1 hr	5

3.2	Illustrated Anatomical and Procedural Review	2 hrs	5
3.3	Evaluation and Management (E/M) Service Guidelines	3 hrs	5
3.4	Evaluation and Management	3 hrs	5
3.5	Anesthesia Guidelines	3 hrs	5
3.6	Anesthesia	3 hrs	5
3.7	Surgery Guidelines	3 hrs	5
3.8	Surgery	3 hrs	5
3.9	Radiology Guidelines (Including Nuclear Medicine and Diagnostic Ultrasound)	3 hrs	5
3.10	Radiology	3hrs	5
3.11	Pathology and Laboratory Guidelines	3 hrs	5
3.12	Pathology and Laboratory	3 hrs	5
3.13	Medical Guidelines	3 hrs	5
4	Medical Coding- International statistical Classification of Diseases (ICD-10 CM)	36	
4.1	Preface	1 hr	6
4.2	List of Features	1 hr	6
4.3	Practical Steps of Using ICD-- CM Book	1 hr	6
4.4	Symbols and Conventions	1 hr	6
4.5	Anatomical Illustrations	1 hr	6
4.6	ICD -10 CM	1 hr	6
4.7	Certain Infectious and Parasitic Diseases	1 hr	6
4.8	Neoplasms	2 hrs	6
4.9	Diseases of the Blood and Blood -Forming Organs and Certain Disorders Involving the Immune Mechanism	2 hrs	6
4.10	Endocrine, Nutritional and Metabolic Diseases	1 hr	6
4.11	Mental, Behavioral and Neurodevelopmental Disorders	1 hr	6
4.12	Diseases of the Nervous System	1 hr	6

4.13	Diseases of the Eye and Adnexa	2hr	6
4.14	Diseases of the Ear and Mastoid Process	1 hr	6
4.15	Diseases of the Circulatory System	1hr	6
4.16	Diseases of the Respiratory System	2 hrs	6
4.17	Diseases of the Digestive System	1hr	6
4.18	Diseases of the Skin and Subcutaneous Tissue	1 hr	6
4.19	Diseases of the Musculoskeletal System and Connective Tissue	1 hr	6
4.20	Diseases of the Genitourinary System	1 hr	6
4.21	Pregnancy, Childbirth and the Puerperium	1 hr	6
4.22	Certain Conditions Originating in the Perinatal Period	1 hr	6
4.23	Congenital Malformations, Deformations, and Chromosomal Abnormalities	2hrs	6
4.24	Symptoms, Signs, and Abnormal clinical and Laboratory Findings, Not elsewhere classified	2 hrs	6
4.25	Injury, Poisoning, and Certain other Consequences of External Causes	2 hr	6
4.26	External Cause of Morbidity	1 hr	6
4.27	Factors Influencing Health Status and Contact with Health Services	1 hr	6
4.28	Appendix A	1hr	6
4.29	Appendix B	1 hr	6

REFERENCES

1. Federative Committee on Anatomical Terminology (2008). Terminologia Histologica – International Terms for Human Cytology and Histology. Cardiff: Lippincott Williams & Wilkins.
2. Anatomy of the Human Body”. Henry Gray. 20th Edition. 1918
3. Introduction to Medical Terminology, Ann Ehrlich, Carol L. Schroeder – 3rd Edition, 2014
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5. McMinn and Abrahams' Clinical Atlas of Human Anatomy, 7th Edition, 2013, Peter H. Abrahams
6. HCPCS Level II Professional Edition, 2016, Carol J. Buck.
7. Express Reference Card - CPT & HCPCS Modifiers 2018, American Medical Association.
8. 2015 HCPCS Level II Professional Edition, Carol Buck.

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10. 2010 HCPCS Level II (Professional Edition), Carol J. Buck
11. CPT2009: Current Procedural Terminology, Michael Beebe; American Medical Association. 2008.
12. Cpt 94: Physicians' Current Procedural Terminology, Celeste G. Kirschner, Robin C. Burkett, Judy A. Coy, 1993.
13. Workbook for Step-by-Step Medical Coding, 2018 Edition, Carol J. Buck MSCPC CCS-P.
14. CPT 2017 Professional Edition, American Medical Association.
15. Centore, Anthony. "2013 CPT Code Revisions".
16. ICD-10, Edition 1992, UNAIDS World Health Organization.
17. ICD-9-CM Inpatient Coding Reference and Study Guide, Linda Kobayashi.
18. Coders' Desk Reference for ICD-9-CM Procedures 2014, Optum.
19. Principles and Practice of ICD-10 Coding, 2008 Dharendra Verma , Mohamed El-Sayed Ali
20. 2018 ICD-10-CM 1st Edition, 2017, Carol J. Buck.

List of Students (2018-2019)

- 1) Amala Chacko
- 2) Ananthakrishnan
- 3) Aniemma K Joseph
- 4) Ashitha C Dileep
- 5) Jinson Jacob
- 6) Dhanest M T
- 7) Mahesh Krishnan
- 8) Neenu Ann Mathew
- 9) Sandra V P
- 10) Stinumol T S
- 11) Akhila Thankachan
- 12) Arjun Santhosh
- 13) Bindhuja V
- 14) Jinson James
- 15) Nandu Ajith
- 16) Sobith M Shaji
- 17) Amal Jagadeesh
- 18) Animol Gracy James

Department of Zoology, CMS College, Kottayam
Value Added Course on Medical Coding (2018-2019)

List of Students

	Name of the student	5/12	6/12	7/12	10/12	11/12	12/12	13/12	14/12
1	Amala Chacko	✓	✓	✓	✓	✓	✓	✓	✓
2	Ananthakrishnan	✓	✓	✓	✓	✓	✓	✓	✓
3	Aniemma K Joseph	✓	✓	✓	✓	✓	✓	✓	✓
4	Ashitha C Dileep	A	✓	✓	✓	✓	✓	✓	A
5	Jinson Jacob	✓	✓	A	✓	✓	✓	✓	✓
6	Dhanest M T	✓	✓	✓	✓	✓	✓	✓	✓
7	Mahesh Krishnan	✓	✓	✓	✓	✓	✓	✓	✓
8	Neenu Ann Mathew	✓	✓	✓	✓	✓	✓	✓	✓
9	Sandra V P	✓	✓	✓	✓	✓	✓	✓	✓
10	Stinumol T S	✓	✓	✓	✓	✓	✓	✓	✓
11	Akhila Thankachan	✓	✓	✓	A	✓	✓	✓	✓
12	Arjun Santhosh	✓	✓	✓	✓	✓	✓	✓	✓
13	Bindhuja V	✓	✓	✓	✓	✓	✓	✓	✓
14	Jinson James	✓	✓	✓	✓	✓	✓	✓	✓
15	Nandu Ajith	✓	✓	✓	✓	✓	✓	✓	✓
16	Sobith M Shaji	✓	✓	✓	✓	✓	✓	✓	✓
17	Amal Jagadeesh	✓	✓	✓	✓	✓	✓	✓	✓
18	Animol Gracy James	✓	✓	✓	✓	✓	✓	✓	✓

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List of Students

Name of the student	19/11	20/11	22/11	26/11	27/11	28/11	29/11	30/11	2/12
Amala Chacko	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ananthakrishnan	✓	✓	✓	✓	✓	✓	✓	✓	✓
Aniemma K Joseph	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ashitha C Dileep	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jinson Jacob	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dhanest M T	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Bindhuja V	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Nandu Ajith	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sobith M Shaji	✓	✓	✓	✓	✓	✓	✓	✓	✓
Amal Jagadeesh	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Name of the student	22/10/18	25/10/18	26/10	29/10	5/11/18	6/11/18	10/11	14/11	16/11
Amala Chacko	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ananthakrishnan	✓	✓	✓	✓	✓	✓	✓	✓	✓
Anlemma K Joseph	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ashitha C Dileep	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jinson Jacob	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dhanest M T	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mahesh Krishnan	✓	✓	✓	✓	✓	✓	✓	✓	✓
Neenu Ann Mathew	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sandra VP	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stinumol T S	✓	✓	✓	✓	✓	✓	✓	✓	✓
Akhila Thankachan	✓	✓	✓	✓	✓	✓	✓	✓	✓
Arjun Santhosh	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Nandu Ajith	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sobith M Shaji	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Animol Gracy James	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Report on Value added programme-Diploma in Medical coding 2018-19

Course offered by- Department of Zoology, CMS College Kottayam (Autonomus) and IIMC Kottayam

Course offered to- III year B.Sc. Zoology students

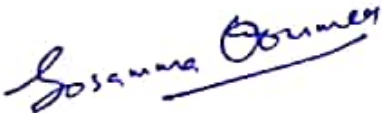
The value added program offered by the Department of Zoology and IIMC Kottayam on Medical coding for final year B.Sc. Zoology students began on 1st October 2018. The course was designed with 144 hours of both theory and practical to develop expertise in the field of medical coding and billing. A total of 18 students enrolled for the programme.

Students were given training by CPC certified faculties using interactive modules, specific quizzes, self evaluations and e- handouts. The course was structured to help the students develop a strong base in human anatomy and medical terms.

Mock interviews were also conducted to equip the students for job application and placement.

The course was completed on April, 2019.

13 students were successfully placed on the due completion of the course after attending exam and interviews.


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