Krishna Institute of Medical Sciences "Deemed To Be" University, Karad

Title of the course

Medical coding – certified professional coder

Preamble

Medical Coding program is designed to help meet the demands for industry-current professionals with the knowledge and skills to pursue career opportunities in the growing healthcare industry. The program covers medical terminology, computerized billing procedures and medical coding.

Objective

- ☐Identify the purpose of the CPT®, ICD-10-CM, and HCPCS Level II code books
- Understand and apply the official ICD-10-CM coding guidelines☐☐Apply coding conventions when assigning diagnoses and procedure codes
- Identify the information in appendices of the CPT® code book
- ☐Explain the determination of the levels of E/M services
- ☐Code a wide variety of patient services using CPT®, ICD-10-CM, and HCPCS Level II codes
- ☐List the major features of HCPCS Level II codes
- ☐Provide practical application of coding operative reports and evaluation and management services

Graduate Attributes(All faculties Common)

1. **Professionalism and Humanism**. In achieving this competency, it is important that fellows demonstrate that their actions serve the interests of their patients above their own self-interests. In their clinical care rotations and in discussion forums the following characteristics are continually monitored: altruism, accountability, reliability, courtesy, sensitivity, integrity and respect for others. Fellows must demonstrate their pursuit of continuous professional development responsiveness to the needs of patients and society. Fellows will demonstrate, as one of their core values, that they truly care for their patients by doing their best in serving their patients' needs and most importantly by consistently demonstrating true compassion; that is, an emphatic attitude that leads to an action to reduce the suffering of others. Important aspects of this competency are effective interactions with other members of the healthcare team, an absence of hubrus and willingness to obtain help from other professionals, a cooperative style of working with teams, and a willingness to recognize and take appropriate action when witnessing unethical behavior.

2. **Effective Communication and Leadership Skills.** Fellows will demonstrate effective written, verbal, and non-verbal communication when participating in patient care. This involves consulting and collaborating with colleagues and coworkers, teaching and presenting in the academic center and in the community. Information exchange and collaboration with patients and their loved ones is the most important communication skill to be mastered, and all trainees are expected to excel in it by the time of their graduation. Trainees will demonstrate effective listening skills and be able to demonstrate to their patients that they understand their needs. Fellows will display that they can create a therapeutic relationship with patients by using effective communication skills, interpretable language, active and responsive listening, patient education and counseling and assisting other professionals to do the best job possible for patients of common concern. Fellows will be able to define their own leadership skills and type of leadership qualities that they possess as well as the strengths and weaknesses of their own leadership style. Fellows will understand how to alter their communication techniques to be more effective leaders. This will include the ability of a resident to understand how others perceive them, to be able to modulate what they do so that others perceive them in a more positive light, and to use communication to help themselves and others find motivation, be optimistic and create a positive environment with particular emphasis on instilling hope in their patients and their loved ones.

3. **Clinical Ethics and Moral Reasoning**. Fellows will recognize the ethical dimensions of medical practice and health care policy. The principles of patient rights to autonomy, beneficence, non-maleficence, and justice will be demonstrated by all fellows. Fellows will incorporate these principles into their patient care, clinical decision-making and discussion groups by: • Ensuring patient's rights to self-determination and decision making. This will include the proper use of advanced directives, durable power of attorney for health care, surrogate decision making, informed consent, implied consent, disclosure, confidentiality and futility. • Acting in good faith to preserve life, restore health, reduce suffering and restore or maintain function without abandonment or conflict of interest. • Removing, preventing and doing no harm by upholding the standards of professionalism, confidentiality, compassion and effective communication and using effective palliation and emotional support. • Allocating medical resources fairly and according to medical need and optimal benefit to the patient. • Applying the medical-legal issues surrounding the Principle of Double Effect, euthanasia, physician assisted suicide, and withdrawing or withholding life support. Fellows will be able to identify alternatives for difficult ethical choices by systematically analyzing situations and considerations that are conflicting and ideas that support different alternatives. Fellows will be able to formulate, defend, and carry out a course of action that takes into account ethical complexity. The graduate of this program must be able to recognize the nature of value systems of patients and others and be able to make ethical choices that are in the interest of their patients while maintaining their own ethical integrity. Fellows will

include relevant case and statutory law in their decision-making and during their analysis and defense of their ethical choices. Fellows will be able to obtain valid consent and provide care when patients make poor judgments or refuse treatment. Fellows will be able to apply current ethical ideas in end-of-life care and in the care of individuals who are incapacitated or incompetent and unable to make their own decisions. Fellows will be able to recognize and effectively deal with unethical behavior in members of the healthcare team. Fellows will understand how to obtain additional help and be able to reach consensus when conflicts of opinions arise from ethical dilemmas.

4. **Problem-Solving**. Fellows will need to demonstrate, in areas for which they have limited prior experience, the ability to recognize a problem, characterize it, formulate a question that needs to be answered in order to address the issue, identify sources of information, find and critically appraise relevant literature for accuracy and completeness and develop a plan of action in an effort to solve the problem. They will integrate and interpret factual information, extract knowledge that is relevant to their patient and apply it to their patient after recognizing factors that may influence the plan such as cost, opposition, alternate strategies and adverse effects. In addition, they will subsequently assess the results of their action. Fellows will exhibit tolerance and consideration of opinions from others, understand the socioeconomic and cultural context of the problem, consider the problem as an opportunity for change and advancement of knowledge and seek help when the problem is outside the range of knowledge that they possess. This will require that the fellow be observant, empathetic, and a good listener, be able to recognize contradiction, discrepancy, and separate normal from abnormal findings, organize information, identify issues that have the greatest impact, and estimate the implications of the problem, its severity and extent. Effecting the plan is a key skill for the fellow to demonstrate as well as assessing the outcome of their strategy.

5. **Life-Long Teaching and Learning**. Fellows will be able to apply evidence-based medicine to investigate, evaluate and improve the patient care that they offer. They will understand how to be aware of the limits of their personal knowledge and experience, set clear learning goals for themselves to pursue, explore new opportunities for intellectual and professional growth and then apply new knowledge to their practice that they ascertain as being quality information. Fellows will learn how to analyze and evaluate their practice experience and implement strategies to improve their practice. They will learn to self-evaluate cognitive, technical, attitudinal and procedural aspects of care. They will need to be able to recognize and admit error and develop a system or process to reduce error and near misses. They will need to know how to use information technology to access and manage information and to reduce error and support patient care decisions. They will need to find information technology that allows their education and their patients' education to continuously improve.

6. **Self-Awareness, Self-Care and Personal Growth**. Fellows shall become aware of their limitations, strengths, weaknesses, and personal vulnerabilities. They will assess their

own personal values and priorities in order to develop and maintain an appropriate balance of personal and professional commitments and understand how the qualities and actions of their personal life can enhance their professional lives and vice versa. They will learn how to seek help and advice when needed for their own difficulties and develop appropriate personal coping strategies and mechanisms for stress-reduction. They will recognize how their actions affect others in their professional circle. They will learn how to seek, accurately review, and respond to performance feedback. They will learn how to take action in an effort to develop their own careers and achieve their own performance standards in either the academic or private sector. They will understand how to be a good citizen in the organization that they join. They will learn how to integrate a program of personal good health and stress-reduction into their daily lives. Fellows will understand the concept that the education of the heart and their personal growth is at least as important as the education of their mind and professional growth.

7. **Management Skills for Clinical or Academic Systems of Practice**. Fellows will learn and understand the various approaches to the organization, financing and delivery of health care. They will recognize threats to their own professionalism as posed by conflicts of interest inherent in financial and organizational arrangements. They will have the ability and vision to use new developments in technology and information systems to manage, problem-solve and make decisions that are relevant to the efficient and effective medical care of individuals and populations. They will learn to understand the context in which they practice and understand the interdependence between the patient care that they provide, that is provided by others and that is provided to the society at large. They will learn how to apply their knowledge to improve the care of individual patients and groups of patients as well as others in the health care system. They will learn to apply systematic and cost-effective strategies to prevent, diagnose and treat in a manner that never compromises quality of care. They will learn how to collaborate with other members of the team and their patients and families to coordinate care, to assist patients in dealing effectively with a complex system, and to improve systematic processes of care in an effort to improve outcomes. Whatever constraints are placed on the healthcare system, they will demonstrate their ability to remain a consummate advocate for the quality of care of the patient to whom they attend. They will learn how to use their leadership style, organizational chain of command, multi-tasking skills, and due process to best effect change that would lead to improved patient or practice environment outcomes.

8. **Social, Cultural and Community Context of Healthcare**. The fellow will recognize the diverse factors that influence the health of individuals in the community. They will be able to identify social, cultural, familial, psychological, economic, environmental, legal, political and spiritual factors that impact health care and health care delivery. They will respond to the social context created by these factors by planning and advocating the appropriate course of action at both the individual and community level. They will develop zero tolerance for stereotypic language, racism, sexism, ageism, and aspersions

to individuals or groups based on ethnic, religious and sexual preference or lifestyle choices. They will avoid identifying individuals by the name of their disease. They will understand all the reasons behind non-adherence. They will learn the benefits of being an advocate for better health for patients in the community and understand the resources available in the community to provide ethnically- and gender-sensitive and culturally-competent healthcare.

Course Duration
1 year

Annual intake
2 student.

Course fee.
As per University rules

Selection method :
Entrance Examination conducted by the University

Faculty :
Course Director- Dr A.Y.Kshirsagar M.S, F.I.C.S, F.A.I.S, F.M.A.S (Medical Director)

Infrastructure
We have High-speed Internet connection with Blackboard supported Operating System & Web browser. And fully functional coding department.

Contributing department
MEDICAL RECORDS DEPARTMENT

Medium of instruction
English

ATTENDENCE
Every candidate shall attend at least 80% of total number of classes conducted in a calendar year from date of commencement of the term to the last working day as notified by the university in

each of the subjects prescribed for that year separately in theory and practical. Only such candidates are eligible to appear for the University examinations in their first attempt. Special classes conducted for any purpose shall not be considered for the calculation of percentage of attendance for eligibility.

Medical Coding Syllabus

- Anatomy Structure of the human body to increase your understanding.
- Physiology How the human body functions.
- Medical definitions and terminology Includes pronunciation and use of medical prefixes.
- Coding medical procedures What to code and how to prepare the forms.
- Professional claim information How to set up medical claims for Medicare, Medicaid, private insurance companies, HMOs, PPOs, workers' compensation and personal injury cases.
- Practice You'll get plenty of practice doing Medical Coding with personal consultation from your own instructor.

1. The World of Health Care

In this introductory lesson, students learn about the daily activities in medical facilities. Students learn about the responsibilities of Medical coders and Billers, This lesson also discusses the many career opportunities available to medical coding and billing specialists.

2. Introduction to Medical Terminology: Word Parts

Students get their first taste of how they will use medical terms in their new careers. They learn about root words, prefixes and suffixes and learn how to derive word parts from medical terms. In addition, students practice using a medical dictionary.

3. Medical Terminology: Dividing and Combining Terms

Learn to divide and combine difficult medical words to help you understand and meanings of these words. Students also learn how these medical terms are used to describe diagnoses and procedures.

4. Medical Terminology: Abbreviations, Symbols and Special Terms

The last lesson on medical terminology teaches students to recognize common medical abbreviations, symbols and plural words. This lesson also discusses special terms such as eponyms, acronyms, homophones, and antonyms.

5. Documenting Medical Records

Students learn about the role medical records play in a coding specialist's job. They explore the importance of documentation in medical records and learn to recognize the various types of dictation formats. This lesson also discusses how healthcare professionals manage medical records.

6. Medical Ethics
Concepts of ethics, compliance, fraud and abuse and teaches students how these concepts apply to medial coding specialists. Students also learn about the importance of confidentiality when dealing with medical records and discusses insurance audits and the legal concepts involved.

7. Diagnostic Coding
Students are introduced to the actual coding process. Students learn about the history of the International Classification of Diseases and the development of the ICD-9-CM coding system. Additionally, students learn to identify main terms and sub terms and describe coding pathways.

8. ICD-10-CM Coding Manual Introduction
This lesson discusses the structure of the coding manual as well as the purposes of the various volumes within the manual. Students learn to handle abbreviations, cross references, and punctuation when coding, and they gain an introduction to Volumes I and II of the ICD-9-CM.

9. ICD-10-CM Diagnosis Coding: Guidelines and Rules
In this lesson, students learn the guidelines and rules of the diagnosis coding process. Students learn how coders interact with the super bill and claim forms and how the forms relate to the ICD-9-CM. Basic coding exercises also allow students to practice what they've learned so far.

10. ICD-10-CM Coding from Infections to Blood Diseases
Student start coding diagnoses. Students learn about infections, parasitic diseases, and neoplasms, as well as how to code them. The lesson also discusses the coding of endocrine, nutritional, metabolic, and blood diseases.

11. ICD-10-CM Coding from Mental Disorders to the Respiratory System
Students get more practice with diagnosis coding as they learn about the nervous, circulatory, and respiratory systems. This lesson also teaches students about mental disorders and how to code these disorders.

12. ICD-10-CM Coding from the Digestive System to Pregnancy
In this lesson, students learn about the digestive and genitourinary systems. Students gain practice coding diagnoses related to childbirth, the puerperium and complications of pregnancy.

13. ICD-9-CM Coding from the Skin to Conditions of the Perinatal Period
This lesson teaches students about diagnosis coding of skin and subcutaneous tissue. Students also learn about the musculoskeletal system, congenital abnormalities, and conditions in the perinatal period, as well as how to code related diagnoses.

14. ICD-9-CM Coding from Symptoms to Complications

From this lessons, students practice coding symptoms, signs, and ill-defined conditions, as well as injuries and poisoning.

15. V Codes, E Codes and ICD-9-CM Coding Practicum
Students get to practice their new coding skills. This practicum allows students to apply their diagnosis coding knowledge in real-world scenarios. Students also learn how to apply V-codes and E-codes in coding situations.

1. CPT Coding
Students learn about the history of procedural coding and how to differentiate between CPT and HCPCS codes. This lesson also explains the structure and format of the CPT coding manual, as well as the basic steps of CPT coding.

2. CPT Coding from the Integumentary System
In this lesson, students learn to code procedures related to the integumentary system Coding Biopsises, skin lesions, excisions, burns, Breast procedures, skin grafts etc.

3. CPT Coding from the Reproductive Systems to the Operating Microscope
This lesson teaches students about the male and female reproductive systems. Students learn to code maternity and childbirth procedures, as well as procedures related to the endocrine, nervous, visual, and auditory systems. Students also learn coding for microscopic procedures.

4. CPT Coding for Radiology, Pathology, Medicine and Anesthesia
The last lesson in the pack teaches students about radiology terms, subsections, guidelines and coding radiology procedures. Guidelines and coding information for pathology and anesthesia are also included.

5. CPT Coding Evaluation and Management Services
This lesson introduces students to evaluation and management codes, an important area for outpatient coders. Additionally, the lesson covers documentation guidelines and evaluation and management level sections and modifiers.

6. Comprehensive CPT Evaluation and Management
Students continue to learn about evaluation and management coding in this lesson. In addition, students learn about the coding auditing process, as well as, how encounter forms are used in a coding specialist's work.

7. Comprehensive Surgery Coding
In this lesson, students continue to practice procedure coding. They get a review of previously discussed CPT codes specific to surgery, a major area of outpatient medical coding.

8. Comprehensive Musculoskeletal coding

9. Comprehensive Digestive System Coding

10. Comprehensive Urology and Reproductive system coding:

11. Comprehensive Pulmonology and Cardiovascular coding.

Semester I

A) Paper – I

a) Theory -<u>150 Hrs</u> (Credits – 10)

Medical Terminology: Dividing and Combining Terms

Documenting Medical Records

b) Practical - (Hrs 270 , Credits – 09)
Diagnostic Coding
Comprehensive CPT Evaluation and Management

C. Discipline specific electives - (Hrs 150 Theory60;Practical 90, Credits –7)

- Comprehensive Urology and Reproductive system coding
- Comprehensive Pulmonology and Cardiovascular coding

Semester I

Course	Course title	Number of Hours per semester		Total	Number of Credits / Semester		Total Credits
		Theory	Practical		Theory	Practical	
Paper - I	Medical Terminology: Dividing and Combining Terms	75	-	75	5	-	5
Paper - I	Documenting Medical Records	75	-	75	5	-	5
Paper - I	Diagnostic Coding	-	120	120	-	4	4
Paper – I	Comprehensive CPT Evaluation and Management	-	150	150	-	5	5
DSE	• Comprehensive						

		60	90	150	4	3	7
	Urology and Reproductive system coding: • Comprehensive Pulmonology and Cardiovascular coding.						
	Total	**210**	**360**	**570**	**14**	**12**	**26**

Semester II

A) Paper – I

a) Theory -150 Hrs (Credits – 10)

ICD-10-CM Diagnosis Coding: Guidelines and Rules
ICD-10-CM Coding from Infections to Blood Diseases

b) Practical - (Hrs 210 , Credits – 07)

ICD-10-CM Coding from the Digestive System to Pregnancy-I
ICD-10-CM Coding from the Digestive System to Pregnancy-II

C. Discipline specific electives - (Hrs 150 Theory60;Practical 90, Credits –7)
Comprehensive Surgery Coding
Comprehensive Musculoskeletal coding

Semester II

Course	Course title	Number of Hours per semester		Total	Number of Credits / Semester		Total Credits
		Theory	Practical		Theory	Practical	
Paper - I	ICD-10-CM Diagnosis Coding: Guidelines and Rules	75	-	75	5	-	5
Paper - I	ICD-10-CM Coding from Infections to Blood Diseases	75	-	75	5	-	5
Paper - I	ICD-10-CM Coding from the Digestive System to Pregnancy-I	-	120	120	-	4	4
Paper - I	ICD-10-CM Coding from the Digestive System to Pregnancy-II	-	90	90	-	3	3
DSE	▪ Comprehensive Surgery Coding ▪ Comprehensive Musculoskeletal coding	**60**	**90**	**150**	**4**	**3**	**7**
	Total	**210**	**300**	**510**	**14**	**10**	**24**

Textbooks:
1. Medical Coding Training: CPC®; AAPC publisher
2. Medical Coding Training: Practical Application CPC®; AAPC publisher

Required Code Books (Not Included):
1. CPT® Professional Edition code book (2020 year), AMA publisher
2. ICD-10-CM code book (2020 year), any publisher
3. HCPCS Level II code book (2020 year), any publisher

Recommended Textbooks/Supplies (Not Included):
1. Medical dictionary, any publisher

Examination pattern-

Internal assessment examination will be converted to of 20 marks theory and 20 marks practical and will be added in End semester examination.

End semester examination:

Question Paper Pattern:

Theory: 80 Marks

Answer all the questions.

   I.   Multiple Choice Question (MCQ) = 20 X 20 = 20
   II.   Essay question : 20 x1 =20
   III.   Long Answers(Answer 2 out of 3) = 2 X 10 = 20
   IV.   Short Answers (Answers 4 out of 6) = 4 x 5 = 20

Total = 80 Marks

Practical:

Oral Examination: 30 Marks

Practical Examination 50 Marks

Total Marks : 80.

Total exam marks for end semester are 100 marks theory and 100 marks practical.

   1. Promotion and award ofgrades

A student shall be declared PASS and eligible for getting he/she secures at least 50% marks in that particular course including internal assessment..

2. Carry forward ofmarks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified ,then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

3. Improvement of internalassessment

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

Grading ofperformances

Letter grades and grade pointsallocations:

Based on the performances, each student shall be awarded a final letter grade at the end   of the semester for each course. The letter grades and their corresponding grade points are given in table I

Table –I Letter grades and grade points equivalent
to Percentage of marks and performances

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90.00 – 100	O	10	Outstanding
80.00 – 89.99	A	9	Excellent
70.00 – 79.99	B	8	Good
60.00 – 69.99	C	7	Fair
50.00 – 59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

17. The Semester grade point average(SGPA)

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For

example, if a student takes five courses(Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student's grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students' SGPA is equalto:

SGPA =

$$\frac{C1G1 + C2G2 + C3G3 + C4G4 + C5G5}{C1 + C2 + C3 + C4 + C5}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and ABS grade awarded in that semester. For example if a learner has a F or ABS grade in course 4, the SGPA shall then be computed as:

$$\textbf{SGPA} = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4* ZERO + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

Cumulative Grade Point Average(CGPA)

The CGPA is calculated with the SGPA of all the VIII semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all VIII semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s),till the course(s) is/are passed. When the course(s)is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculatedas:

CGPA =

$$\frac{C1S1 + C2S2 + C3S3 + C4S4 + C5S5 + C6S6 + C7S7 + C8S8}{C1 + C2 + C3 + C4 + C5 + C6 + C7 + C8}$$

where $C_1, C_2, C_3,...$ is the total number of credits for semester I,II,III,…. and $S_1, S_2, S_3,...$is the SGPA of semester I,II,III,…. .

18. Declaration ofclass
The class shall be awarded on the basis of CGPA as follows:
 First ClasswithDistinction= CGPA of. 7.50 andabove
FirstClass= CGPA of 6.00 to7.49
SecondClass= CGPA of 5.00 to5.99
19. Award ofRanks

Ranks and Medals shall be awarded on the basis of final CGPA.

20. Award ofdegree
Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

Final Mark list Of University Examination

Sr.No.	Semester	Internal Assessment		End Semester Examination		Total	
		Theory 20 marks	Practical 20 marks	Theory 80 marks	Practical 80 marks	Theory 100 marks	Practical 100 marks
1	Semester I						
2	Semester II						

Program: Medical Coding   **Department:** KIMS   **Subject:** Medical Coding   **Scheme: CBCS**

Subject		Sem-I			Sem-II			Total		
		T	**P**	**Total**	**T**	**P**	**Total**	**T**	**P**	**Total**
Core-I	Hr	150	270	420	150	210	360	**300**	**480**	**780**
	Cr	10	9	19	10	7	17	**20**	**16**	**36**
Elective **DSE/** **AEC**	Hr	60	90	150	60	90	150	**120**	**180**	**300**
	Cr	4	3	7	4	3	7	**8**	**6**	**14**
Grand Total	**Hr**	210	360	570	210	300	510	**420**	**660**	**1080**
	Cr	14	12	26	14	10	24	**28**	**22**	**50**

Discipline Specific Elective – Any One

Semester I-   1. Comprehensive Urology and Reproductive system coding

           1.   Comprehensive Pulmonology and cardiovascular coding.

Semester II- 1**.** Comprehensive Surgery Coding

        2**.** Comprehensive Musculoskeletal Coding