Scientific Writing

- **COURSE TITLE:**

  Scientific Writing

- **COURSE AIM:**

  To demystify the writing process and teach the fundamentals of effective scientific writing.

- **INTENDED LEARNING OUTCOMES (ILOS):**

- Knowledge

  1. Identify Scientific Writing.
  2. Discuss common writing problems.
  3. Define Revision Techniques.

- Skill

  4. Applies writing clearly, concisely and coherently in a professional environment.

- **COURSE CONTENTS (OUTLINE):**

  1. Introduction to Scientific Writing
  2. How to write a typical Report
  3. How to write a scientific paper
  4. References styles
  5. Different tools for citations and referencing

- **TRAINING METHODOLOGY:**

- Face to face Lectures
- Online Materials

- **FACILITIES REQUIRED:**

- Data Show Projector
- Computer

- **COURSE DURATION:**

6 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

- 40%:
    - On class activities (discussion and participation)
    - Assignments
- 20%:
    - Quizzes
- 40 %:
    - Final Report

Communication in Teams

- **COURSE TITLE:**

  Communication in Teams

- **COURSE AIM:**

  An experiential course that helps trainees become "team players" by understanding their roles, the importance of communication, and group cohesion.

- **INTENDED LEARNING OUTCOMES (ILOS):**

- Knowledge

  1. Discuss team roles, the importance of communication, and group cohesion.
  2. Discuss generally the basic principles of effective communication.

- Skills

  1. Find, organize and communicate information effectively using information technologies.
  2. Translate communication principles into using digital communication tools in interpersonal, small group, and public presentational settings.
  3. Develop your skills in technological modes, document sharing, internet publishing, discussion forums, blogging, electronic meetings, and social networks.
  4. Basic web-design principles will be presented, and trainees will create and publish a personal blog, and work in a virtual team to create a group project.
  5. Create a final research paper that will explore some of the issues raised in the course.

COURSE CONTENTS (OUTLINE):

1. Professional Communication Skills
2. Verbal Communication
3. Nonverbal Communication
4. Communication Media
5. Team Development
6. Team Dynamics
7. Find anything online
8. On Cloud
9. Blogging

TRAINING METHODOLOGY:

- Face to face Lectures
- Group discussions
- Virtual Discussions via Moodle
- Questionnaires
- Videos
- Demos & Hands on practice

FACILITIES REQUIRED:

- Data show Projector
- Computer lab
- Internet access
- Speakers

COURSE DURATION:

12 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

- 40%
  - Home assignments
  - On class activities
  - Scenario Problems
- 20%
  - Quizzes
- 40%
  - Final Wiki project
  - Final Report
  - Final Presentation

Introduction to Information and Computer Science

- **COURSE TITLE:**

Introduction to Information and Computer Science

- **COURSE AIM (OVERVIEW):**

This course is aimed to make students understand the basic concepts of ICT (Information and Communication technology), this course is designed as four-credit modules on fundamentals of information systems for students who are not planning to major in information systems. The course will cover basic hardware concepts; the structure, or architecture of computers; the software hierarchy from systems software to application programs; fundamentals of networks, internet, database and information systems concepts

- **INTENDED LEARNING OUTCOMES (ILOS):**

Knowledge

1. State correct terminology for computing and technology including for hardware, software, networks, Internet and databases
2. Identify commonly used hardware components.
3. Identify commonly used software applications and operating systems.
4. Explain the function and use of programming languages and identify commonly used languages.

5. Define what a database is, explain what querying languages are and identify commonly used database systems.

6. Describe network computing, its benefits and risks, and identify commonly used communications hardware and software components.

7. Identify security risks for computing systems and discuss potential solutions.

8. Explain the design and development process of a software information system such as an EHR.

Skills:

- **COURSE CONTENTS (OUTLINE):**

  1. Introduction to computer hardware

  2. Introduction to computer software

  3. Introduction to network

  4. Introduction to internet & world wide web

  5. Fundamentals of Databases and Microsoft Access

  6. Fundamentals of information systems

- **TRAINING METHODOLOGY:**

  - Face to face Lectures

  - Practical sessions

  - Discussions

  - Videos

- **FACILITIES REQUIRED:**

- Data show Projector

- Computers lab

- Internet

COURSE DURATION:

32 Hours

ASSESSMENT METHODS AND EVALUATION CRITERIA:

- 40%
  - On class activities
  - Home assignments
- 20%:
  - Quizzes
- 40%
  - Final Exam

Introduction to Health Informatics

- **COURSE TITLE:**

  Introduction to Health Informatics

- **COURSE AIM:**

  The course is a "theoretical" course that gives an overview of Biomedical & Health Informatics (BMHI) as a field of study. The course gives an introduction about the field, terms definitions, and history of development, stakeholders, subfields, current trends, international organizations, ethical issues, importance and challenges of adopting the field as well. The course also gives an overview about healthcare system problems, current applications and future vision.

- **INTENDED LEARNING OUTCOMES:**

- Knowledge
  1. Define biomedical and health informatics (BMHI) as a field of study
  2. Identify the history of health IT and health informatics
  3. Identify different health informatics stakeholders
  4. State the professional roles and skills of health informaticians
  5. Understand the current healthcare system and problems that motivate health informatics
  6. Discuss current situation of HIT in Egypt and future vision
  7. Recognize Biomedical & Health Informatics (BMHI) subfields
  8. Identify the current trends of health informatics
  9. Recognize International Organization concerned with BMHI

10.   Identify HIPAA regulations; history and importance

11.   Recognize E-Health, Telemedicine, Mobile Health and their important applications

12.   Explain the importance and challenges of adopting BMHI

- Skills

13.   Apply HIPAA regulations

14.   Differentiate between privacy, security, confidentiality and ethics related to BMHI

15.   Analyze the barriers of adopting BMHI in developing Societies

- **COURSE CONTENTS:**

1. Health Informatics as a discipline
2. BMHI Subfields and Current Trends
3. HIT and Healthcare System
4. International Organization Concerned with BMHI
5. HIPAA Regulations; Privacy, Confidentiality, and Security of Patient Data
6. E-Health and m-Health
7. Importance and Challenges of Adopting BMHI

- **TRAINING METHODOLOGY:**

- Face to face interactive lectures
- On class discussions
- On class small group activities
- Home assignments
- Reading Paper(s)
- Browsing Related Websites

- Videos

- Quizzes

- Peer evaluation

- **FACILITIES REQUIRED:**
  - Data show

  - Computer lab

  - Internet access

  - Flip chart and markers

- **COURSE DURATION:**
  14 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

  - 40%
    - Active participation and attitude: 10%

    - Class activities: 20%

    - Home assignment: 10%
  - 20%
    - Quizzes
  - 40%
    - Final exam: 30%

    - Final presentation: 10%

Health Management Information System- Part 1

- ▪ **COURSE TITLE:**

  Health Management Information System-Part 1

- ▪ **COURSE AIM:**

  This course gives theoretical overview of Health Management Information System as well as a practical training on virtual system "VistA". The course focuses on the most important applications in clinical informatics with special focus on the Electronic Health Record accompanied by practical sessions on VistA CPRS.

- ▪ **INTENDED LEARNING OUTCOMES:**
- ▪ Knowledge
  1. Describe general functions, purposes and benefits of health information systems
  2. Describe the initiatives that have influenced the evolution and adoption of health information systems
  3. Explain how electronic health records affect patient safety, quality care, efficiency, productivity, and reporting/documentation mechanisms
  4. Identify common components of an HIT system and types of HIT applications
  5. Defines usability, describes general usability principles, and relates usability to adoption in relation to HIT.
  6. Define and differentiate security, confidentiality, and privacy and identify common threats.
- ▪ Skills

7. Compare different types of health information systems in terms of their ability to meet the needs of various types of health care enterprises

8. Propose strategies to minimize major barriers to the adoption of electronic health records

9. Assess the strengths and weaknesses of identified solutions to identified HIT problems

10. Demonstrate beginning level competency in general HIT system use

- **COURSE CONTENTS:**

1. Health Information System Overview
2. Electronic Health Record
3. Computerized Provider Order Entry
4. Clinical Decision Support System
5. Personal Health Record
6. Medical Imaging System, LIS and PIS
7. Administrative, Billing & Financial System
8. Usability

Lab Activities:

1. Lab Activity "Introduction to Components of HIT Systems"
2. Lab Activity "Functions of HIT"
3. Lab Activity "Protecting privacy, security & confidentiality in HIT System"
4. Lab Activity "Patient-Centered Care"
5. Lab Activity – The Effective HIT Systems
6. Lab Activity Fundamentals of Usability in HIT
7. Lab Activity – HIT Facilitated Errors

▪ **TRAINING METHODOLOGY:**

- Face to face interactive lectures

- On class discussions

- Lab Activities

- Reading Paper(s)

- Browsing related websites

- Home Assignments

▪ **FACILITIES REQUIRED:**
- Data show
- Computer lab

- Internet access

- Flip chart and markers

▪ **COURSE DURATION:**

24 Hours

▪ **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

- 40%
  - Active participation and attitude
  - Class activities
  - Home assignment
- 20%
  - Quizzes
- 40%
  - Final exam: 30%
  - Final presentation: 10%

Health Business Process Analysis and Redesign

- **COURSE TITLE:**

    Business Process Analysis (Fundamentals of Health Workflow Process Analysis & Redesign)

- **COURSE AIM:**

    This course covers fundamentals of health business process analysis and redesign as a necessary component of complete practice automation.

- **INTENDED LEARNING OUTCOMES (ILOS):**
- Knowledge
    1. Identify the elements involved in providing patient care within a complex health care setting that must be taken into consideration when examining and proposing changes in workflow processes.
    2. Propose ways in which quality improvement methods, tools and health IT can be applied within a healthcare setting to improve workflow processes.
    3. Identify approaches that would ensure the success of workflow re-design from development and presentation of the implementation plan, to facilitation of decision making meetings, implementation of the changes, evaluation of the new processes, sustainability of new workflow processes, and continuous quality improvement efforts to achieve meaningful use.
- Skill

1. Create diagram of processes in the healthcare setting that support workflow analysis and re-design.

2. Apply to these activities an understanding of health IT, meaningful use, and the challenges practice settings will encounter in achieving meaningful use.

3. Critically analyze the workflow processes in a selected health care setting to determine their effectiveness from the perspective of those being served (i.e., patients), those providing the services (i.e., professional and non-professional staff), and the organization's leadership (i.e., decision makers).

- **COURSE CONTENTS (OUTLINE):**

  1. Concepts of Processes and Process Analysis
  2. Process Mapping Theory and Rationale
  3. Interpreting and Creating Process Diagrams
  4. Acquiring Clinical Process Knowledge
  5. Process Analysis
  6. Process Re-design
  7. Facilitating Meetings for Implementation Decisions
  8. Quality Improvement Methods
  9. Process Change Implementation and Evaluation
  10.   Maintaining and Enhancing the Improvements

- **TRAINING METHODOLOGY:**

  - Face to face Lectures
  - Online Materials

- On class discussion
- Home Assignments

▪ **FACILITIES REQUIRED:**

- Data show Projector
- Computer
- Internet access

▪ **COURSE DURATION:**

24 Hours

▪ **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

- 40%:
  o On class activities (discussion and participation)
  o Assignments
- 20%:
  o Quizzes
- 40 %:
  o Final Report

Fundamentals of Biomedical Research and Statistics

- **COURSE TITLE:**

  Fundamentals of biomedical research and statistics

- **COURSE AIM:**

  The fast & continuous advances in medical science endanger the medical profession by the misunderstanding& misuse of newly introduced interventions. Physicians' knowledge of biology & clinical sciences is not enough to protect them from the application of invalid & flawed experiments in their daily practice. They must be able to understand the foundation of scientific methods, the basics of research design and the use of medical statistics in order to evaluate the scientific base of the new clinical and laboratory approaches.

- **INTENDED LEARNING OUTCOMES:**

  1. Identify the different types of biomedical research
  2. Describe the characteristics of each type of research
  3. Differentiate the different types of data and different types of data distribution
  4. Outline the different source of data
  5. Describe the principal of sampling and the different types of samples in biomedical research
  6. Practice how to prepare raw data for statistical processing and how to use a statistical software

7. Present the results of biomedical research and effectively construct tables and perform proper charts using computer software

8. Explain the concept and the importance of confidence interval in medical literature

9. Explain the concept and importance of the confidence interval in medical literature

10. Explain the concept and the importance of hypothesis testing and statistical significance

11. Choose and carryout the different simple statistical tests for comparing the different types of data using statistical software

12. Choose and carryout the different statistical approaches for correlating variables using statistical software

13. Explain the principals of univariate and multivariate regression analysis

- **COURSE CONTENTS:**

1. Types and characteristics of biomedical research

2. Types of data and data distribution

3. Source of data

4. Sampling in biomedical research

5. Raw data preparation for statistical process

6. Data descriptive parameters

7. Presentation of results

8. Statistical inference and the concept of confidence interval

9. Hypothesis testing and statistical significance

10. Statistical comparison

11. Correlation and regression

- **TRAINING METHODOLOGY:**
  - Interactive lectures
  - Hands on training
  - Home assignment
  - Printed booklet

- **FACILITIES REQUIRED:**
  - Computer labs
  - Projector

- **COURSE DURATION:**

  20 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**
  - 20%: Participation and discussion
  - 40%: Quizzes and Assignment
  - 40%: Final Exam

Leading Change

- **COURSE TITLE:**

    Leading Change

- **COURSE AIM:**

    This course targets those preparing for leadership roles, principles of leadership and effective management of teams. Emphasis on the leadership modes and styles best suited to IT deployment.

- **INTENDED LEARNING OUTCOMES (ILOS):**
- Knowledge

    1. Explain leadership traits and theories
    2. Recognize leadership's role in IT and EHR project success and project failure
    3. Describe importance of effective leadership of teams
    4. Demonstrate team leadership competencies.

- Skills

    5. Solve leading change related problems
    6. Search for leading change related enquiries
    7. Practice leading change in a final project

- **COURSE CONTENTS (OUTLINE):**

    1. Introduction to Leadership
    2. Overview of the IT Strategic Planning Process
    3. Team and Small Group Communication

4. Conflict Resolution

5. Change Management

- **TRAINING METHODOLOGY:**

  - Face to face Lectures

  - Virtual Discussions via Moodle

  - Questionnaires

  - Videos

  - Demos

- **FACILITIES REQUIRED:**

  - Data show Projector

  - Computer

  - Speakers

- **COURSE DURATION:**

  18 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

- 40%
  - Home assignments
  - On class activities
  - Scenario Problems
- 20%
  - Quizzes
- 40%

  - Final Report

  - Final Presentation

Health Management Information System-Part 2

- **COURSE TITLE:**

  Health Management Information System-Part 2

- **COURSE AIM:**

  This course provides theoretical and practical experience with a laboratory exercises (utilizing the VistA for Education program) that address approaches to assessing, selecting, and configuring EHRs to meet the specific needs of customers and end-users. The course also provides an overview of the most popular vendor systems.

- **INTENDED LEARNING OUTCOMES:**
- Knowledge
  1. Understand clinical workflows from multiple clinician perspectives
  2. Describe the process of migration to an electronic health record (EHR)
- Skills
  3. Given an EHR system, configure the system to achieve features required for meaningful use. The course includes VistA simulation EHR environment lab exercises for:
     a. Patient care clinical workflow
     b. Implementing clinical decision support
     c. Building order sets
     d. Utilizing data entry templates

e. Health summary and clinical reminder reports

4. Assess and compare common commercial Electronic Health Record (EHR) systems using KLAS ratings

5. Evaluate key factors into workplace decisions for selecting vendor-specific systems

- ▪ **COURSE CONTENTS:**

1. Patient Care Clinical Workflow; Multiple Perspectives of Patient Care Lab Exercise 1,2,3

2. Commercial Electronic Health Record (EHR) Systems; Evaluation and Selection

3. Implementing Clinical Decision Support Lab Exercise 1,2,3

4. Migration from Paper Record to an Electronic Health Record System

5. Building Order Sets Lab Exercise 1,2,3,4

6. Creating Data Entry Templates Lab Exercise 1,2,3

7. Health Summary and Clinical Reminder Reports Lab Exercise 1,2

- ▪ **TRAINING METHODOLOGY:**

- Face to face interactive lectures

- On Class Discussions

- Lab Activities

- Reading Paper(s)

- Browsing Related Websites

- Home Assignments

- Quizzes

- ▪ **FACILITIES REQUIRED:**

- Data show

- Computer lab

- Flipcharts and Markers

▪ COURSE DURATION:

20 Hours

▪ ASSESSMENT METHODS AND EVALUATION CRITERIA:

- 40%

  - o Active participation and attitude

  - o Lab activities

  - o Home assignment

- 20%

  - o Quizzes

- 40%

  - o Final Exam: 30%

  - o Final Project: 10%

Standards & Interoperability

▪ **COURSE TITLE:**

Standards & Interoperability

▪ **COURSE AIM:**

This course provides health professionals with an understanding of the existing health information technology (HIT) standards and HIT standardization processes.

▪ **INTENDED LEARNING OUTCOMES (ILOS):**

▪ Knowledge

1. Analyze standards associated with the EHR functional model, the PHR functional model, and the family of profiles associated with specific domain functional requirements

2. Describe data standards required for the interoperable exchange of healthcare data, including terminology, data elements, document standards, imaging standards, and medical device standards.

3. Describe components of health IT standards (including HL7 and TC215) for health information exchange used by various stakeholders.

4. Examine additional standards related to shared and effective use of data, including clinical decision support.

▪ Skills

5. Incorporate professional and regulatory standards related to privacy, confidentiality, and security when implementing and maintaining networks and health information exchange systems, including NHIN.

6. Practice International Classification of Diseases, Tenth Revision, (ICD-10) as a standard application in Egypt

- **COURSE CONTENTS (OUTLINE):**
  1. National and International Standards Developing Organizations
  2. Basic Health Data Standards
  3. EHR Functional Model Standards
  4. Health Data Interchange Standards
  5. Supporting Standards for EHR Applications

- **TRAINING METHODOLOGY:**
  - Face to face Lectures
  - Virtual Discussions via Moodle
  - Demos

- **FACILITIES REQUIRED:**
  - Data show Projector
  - Computer
  - Speakers

- **COURSE DURATION:**
  12 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**
  - 40%
    - Home assignments
    - On class activities
  - 20%
    - Quizzes
  - 40%
    - Final Report
    - Final Presentation

Installation and Maintenance of HIT Systems

- **COURSE TITLE:**

  Installation and Maintenance of HIT Systems

- **COURSE AIM:**

  This course covers fundamentals of selection, installation and maintenance of typical Electronic Health Records (EHR) systems as well as the principles underlying system configuration including basic hardware and software components, principles of system selection, planning, testing, troubleshooting, and final deployment.

- **INTENDED LEARNING OUTCOMES (ILOS):**

- Knowledge

  1. Describe the use of client and server hardware for access to and storage of EHRs
  2. Describe network needs for access to and storage of EHRs
  3. Identify the application software and back-end data storage software needed for a comprehensive, effective Health IT System
  4. Identify 12 possible steps to choosing an EHR system
  5. Define the steps of the Software Development Life Cycle (SDLC) and the purpose and importance of each.
  6. Describe different models of the SDLC and their key differences.
  7. Describe how and why an HIT software application would go through the SDLC

8. Identify and assess protection measures including access control, firewalls, intrusion detection and encryption

9. Determine and document system interfaces and integration requirements

10.   Describe the pitfalls associated with installing a new application in an environment of pre-existing applications

11.   Identify and implement an effective troubleshooting procedure for reporting, evaluating, fixing, deploying, and follow-up of errors, problems, or limitations for the system

- Skill

12.   Develop a process for communicating requirements and supplying updates between vendors/developer and users

13.   Create redundancy and fault-tolerance in systems for access and data storage, providing high performance and reliability

14.   Create, execute, and document a test plan

- **COURSE CONTENTS (OUTLINE):**

1. Elements of a Typical EHR System

2. System Selection – Software and Certification

3. System Selection – Functional and Technical Requirements

4. Structured Systems Analysis and Design

5. Software Development Life Cycle

6. System Security Procedures and Standards

7. System Interfaces and Integration

8. Troubleshooting; Maintenance and Upgrades; Interaction with Vendors, Developers, and Users

9. Creating Fault Tolerant Systems, Backups, and Decommissioning

10. Developing a Test Strategy and Test Plan

11. Pilot Testing and Full Scale Deployment

- **TRAINING METHODOLOGY:**

  - Face to face Lectures

  - Online Materials

  - Class Discussion

- **FACILITIES REQUIRED:**

  - Data show Projector

  - Computer

- **COURSE DURATION:**

  24 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

  - 40%:
    - On class activities (discussion and participation)
    - Assignments
  - 20%:
    - Quizzes
  - 40 %:
    - Final Exam

Evidence Based Healthcare Practice

- **COURSE TITLE:**

  Evidence based Healthcare Practice

- **COURSE AIM:**

  It describes the application of evidence-based Healthcare Practice (EBHP). The discussion begins with the framing of clinical questions that can be answered by appropriate evidence. It then demonstrates how to find and apply the best evidence for answering four major types of clinical questions: interventions, diagnosis, harm, and prognosis. The unit also introduces summarizing of evidence (systematic reviews) as well as clinical practice guidelines and concludes with a discussion of the limitations of EBHP.

- **INTENDED LEARNING OUTCOMES (ILOS):**

- Knowledge

  1. Define the key tenets of Evidence-based Healthcare Practice (EBHP) and its role in the culture of healthcare

  2. Understand EBHP applied to the other key clinical questions of diagnosis, harm, and prognosis

  3. Discuss the benefits and limitations of summarizing evidence

  4. Describe how to implement EBHP in clinical settings through clinical practice guidelines and decision analysis

- Skills

  5. Construct answerable clinical questions and critically appraise evidence answering them

6. Apply Evidence-Based Healthcare Practice (EBHP)for intervention studies, including the phrasing of answerable questions, finding evidence to answer them, and applying them to given clinical situations

- **COURSE CONTENTS (OUTLINE):**

1. Introduction to EBHP
2. Ask: Research Question
3. Align: Research methods, bias and levels of evidence.
4. Acquire: Search Techniques.

- **TRAINING METHODOLOGY:**

  - Face to face Lectures
  - Group discussions
  - Virtual Discussions via Moodle
  - Videos
  - Demos & Hands on practice
  - Case discussions

- **FACILITIES REQUIRED:**

  - Data show Projector
  - Computer
  - Speakers

- **COURSE DURATION:**

  12 Hours

- **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

  - 40%
    - Home assignments
    - On class activities

  - 20%
    - Quizzes

  - 40%
    - Final Case Scenario Report
    - Final Presentation

IT Project Management

- **COURSE TITLE:**

  IT project management

- **COURSE AIM:**

  Most IT projects continue to face difficulties delivering products on time, on budget, and with functionality that is acceptable to the customer. This course shows how IT projects should be managed, from inception to post implementation review. Reviewing the full project lifecycle the students gain insights into how projects work in the real world and the factors that lead to project success

- **INTENDED LEARNING OUTCOMES:**

  1. Discuss the process of project management and its application in delivering successful IT projects
  2. Evaluate a project to develop the scope of work, provide accurate cost estimate and to plan the various activities and make successful cost/schedule/scope trade-offs
  3. Describe and use risk management analysis techniques that identify the factors that put project at risk and to quantify the likely effect of risk on project timescale
  4. Identify the resources required for the project and to produce a work plan and resource schedule
  5. Monitor the progress of a project
  6. Identify, manage and control change throughout a project, resolve issues and mange pitfalls
  7. Create schedules, manage resources, track and control project plans
  8. Deliver project outputs to appropriate quality standards

9. Contribute to the identification and management of project suppliers and follow the stages needed to negotiate an appropriate contracts

10. Mange stakeholder expectations and communication

11. Recognize different standards in project management practices which help to make informed decisions according to best practices

- **COURSE CONTENTS:**

1. Introduction to project management

2. The project management and information technology context

3. The project management process groups

4. Project integration management

5. Project scope management

6. Project time management

7. Project cost management

8. Project quality management

9. Project human resources management

10. Project communication management

11. Project risk management

12. Project procurement management. Project change and issues management

13. Project implementation, closure, and evaluation

14. Comprehensive hands-on introduction to Microsoft project

- **TRAINING METHODOLOGY:**

- Face to Face Lectures

- Interactive discussion

- Hands-on training

- Assignment

- Practice exercises

▪ **FACILITIES REQUIRED:**

- Computer labs

- Data show

- Flip chart

▪ **COURSE DURATION:**

30 Hours

▪ **ASSESSMENT METHODS AND EVALUATION CRITERIA:**

- 20%:
  - o Participation and discussion:
- 40%
  - o Quizzes and assignment
- 40%
  - o Final Exam