

| Module | Learning objectives | Content | Learning methods | Time (min) | Resources | Evaluation |
|---|---|---|--|------------|---------------------------------------|-------------------|
| Module 1 - Principles of research ethics | | | | | | |
| Session 1 | <ol style="list-style-type: none"> 1. ตระหนักถึงหลักจริยธรรมทั่วไปในการวิจัยที่เกี่ยวข้องกับมนุษย์ 2. ติดตามวิวัฒนาการของหลักจริยธรรมการวิจัย 3. ตระหนักถึงการประยุกต์ใช้หลักการในการทดลองทางคลินิก | Principles of research ethics - Declaration of Helsinki - Belmont Report - CIOMS - WHO 2011 | Interactive Power Point presentation | 60 | ppt as handouts / reference materials | session 22b |
| Module 2 - Introduction to GCP | | | | | | |
| Session 2 | <ol style="list-style-type: none"> 1. Recognize the need for GCP 2. Recognize fundamental principles of the Declaration of Helsinki 3. Describe ICH GCP and its principles 4. Describe basic framework of GCP | <ol style="list-style-type: none"> 1. Concept of GCP, Why GCP? 2. History of GCP 3. Declaration of Helsinki 4. Principles of ICH GCP 2016 5. Framework of GCP | Interactive Power Point presentation | 60 | ppt as handouts / reference materials | session 22b |
| Module 3 - Stakeholders and their responsibilities | | | | | | |
| Session 3 | Ethics committee/IRBs: To recognize the role and responsibilities of the Ethics Committee, and the scope of these responsibilities | <ul style="list-style-type: none"> - Responsibilities of EC/IRB - Composition, function and operation - Procedures - Rapports | Interactive Power Point presentation / Discussion of answers of take home quiz | 45 | ppt as handouts | session 22b |
| Session 4 | Investigator: Recognize the roles and responsibilities of the investigator and the scope these responsibilities | Responsibilities of the investigator according to: <ul style="list-style-type: none"> - ICH-GCP 2016 - Declaration of Helsinki (2013) | Interactive Power Point presentation / Discussion of answers of take home quiz | 45 | ppt as handouts / reference materials | session 8 and 22b |
| Session 5 | Sponsor: Recognize the roles and responsibilities of the sponsor and the scope of these responsibilities | <ul style="list-style-type: none"> - Trial design and Trial management - Investigator Selection - Responsibilities related to the Investigational product - Safety information and reporting - Monitoring - Audit - Non compliance - Others sponsor's responsibilities | Interactive Power Point presentation / Discussion of answers of take home quiz | 45 | ppt as handouts / reference materials | session 8 |
| Session 6 | Clinical monitor responsibilities: To recognize the roles and responsibilities of the clinical monitor and the scope of these responsibilities | <ol style="list-style-type: none"> 1. Responsibilities of clinical monitor according to GCP 2. WHO-TDR SOPs on monitoring: <ul style="list-style-type: none"> - Pre trial visit - Initiation visit - Routine monitoring visit - Close out monitoring visit - Writing monitoring visit report | Interactive Power Point presentation / Discussion of answers of take home quiz | 45 | ppt as handouts / reference materials | session 22b |

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| Session 7 | Regulatory authorities responsibilities: - To recognize the responsibilities of Regulatory Authorities during the different phases of product development - To recognize the scope of international and local regulatory requirements | - Pre-licensing regulation; - Post-licensing regulation; - Inspection; - Registration - Pharmacovigilance | Interactive Power Point presentation / Discussion of answers of take home quiz | 45 | ppt as handouts / reference materials | session 22b |
| Module 4 - Monitoring | | | | | | |
| Session 8 | Site visit - Hands-on learning of principles of GCP within the context of clinical monitoring – site assessment, pharmacy, laboratory, archiving, data management, CRF review | Pre-study monitoring visit, initiation visit, routine monitoring visits, close out visit | Site visit – review, and inspection of documents; inspection of facilities, meetings and discussions with study team; facilitated by HSRI clinical monitors | 315 | Study documents / HSRI clinical monitor SOPs | facilitator's observation (guided by checklist) |
| Session 9 | Report writing - Hands-on learning of filling in the monitoring report | Findings and observations of study site and study documents; notes and meetings with study team | 1. Filling in report based on findings, notes and observations taken during the monitoring visit 2. Discussion of report contents and feedback from the facilitator 3. Group presentation | 45 | Study documents / Monitoring report forms / Monitoring visit notes | completeness and correctness of monitoring reports following clinical monitor SOPs |
| Module 5 - Research methodology | | | | | | |
| Session 10 | Recognize the different types of research designs and objectives of each method in the context of epidemiology research, social & behavioral research, and product development | Common research designs - Epidemiology studies - Social & behavioral studies - Phases of product development and objective of each phase including post-surveillance - Study population, criteria for selection and sample sizes - Stakeholders in different phases of product development | Interactive Power Point presentation | 120 | ppt as handouts | session 22b |
| Module 6 - Study Document management | | | | | | |

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| Session 11 | <ul style="list-style-type: none"> - Recognize the importance of trial document management - Define and list the essential trial documents - Follow good research practices in assisting the investigator maintain the investigator's file and manage trial documents | <ul style="list-style-type: none"> - Protocol development and document compatibility (protocol, patient information sheet and CRF) - Purpose of trial master file - List of essential trial documents and purpose - Maintaining trial master file - Maintaining confidentiality - Data and document security - Document archiving rules | Interactive Power Point presentation | 45 | ppt as handouts / Materials for field practicum | session 22b |
| Module 7 - Overview of data management and data handling procedures | | | | | | |
| Session 12a | Recognize the implication of effective trial document control and quality data on data | <ul style="list-style-type: none"> - Overview of data management - Generating and resolving data management | Interactive Power Point presentation | 60 | ppt as handouts | session 22b |
| Session 12b | <ul style="list-style-type: none"> - Recognize the importance of quality data management - Define case report forms, source data and source documents and recognize their differences - Follow good research practices in data handling - Know the importance of maintaining CRF and other forms up-to-date and complete | <ul style="list-style-type: none"> - Source data and source documents - CRF - Source data verification - Corrections to source documents and CRF - HSRI SOP related to Source Data Verification | Interactive Power Point presentation / Field practicum for monitors' course | 60 | ppt as handouts / Documents for field practicum | session 22b |
| Module 8 - Informed consent process | | | | | | |
| Session 13 | <ul style="list-style-type: none"> - Be acquainted with the informed consent process - Identify the ethical principles that guide the informed consent process - Recognize the documentation of the process | <ul style="list-style-type: none"> - Process of obtaining informed consent across age groups and cultures - Elements of informed consent - Assessing participant informed consent and their comprehension of information for consent | Interactive Power Point presentation / Review of actual informed consent documents | 105 | ppt as handouts / Sample information sheet and accompanying written informed consent form | session 22b |
| Module 9 - Investigational Product Management | | | | | | |
| Session 14 | <ul style="list-style-type: none"> - Define an investigational product - Be familiar with requirements for manufacturing, packaging, labeling and coding of investigational product - Be able to trace product receipt, storage, administration and return | <ul style="list-style-type: none"> - Definition of an investigational product - Labeling in open vs. blinded study - Ensuring adequate supply of investigational product - Product storage requirements - Product accountability and inventory | Interactive Power Point presentation | 120 | ppt as handouts / documents for field practicum | session 22b |
| Module 10 - Safety Management | | | | | | |

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| Session 15 | <ul style="list-style-type: none"> - Review the stakeholders roles and responsibilities in safety management - Be familiar with good case management, - Define and recognize an adverse event, adverse drug reaction, serious adverse event, unexpected serious adverse drug reaction - Get familiar with the severity grading and causality assessment - Define good reporting practices | <ul style="list-style-type: none"> - Requirements in terms of safety management for clinical trials - Seriousness vs severity - AE, ADR, SAE, SUSAR and reporting of these events - Safety data reporting during trial implementation and overview of the pharmacovigilance system - Emergency unblinding procedures | Interactive Power Point presentation / Take home quiz given beforehand; results discussed during the lecture | 45 | ppt as handouts / Take home quiz | session 22b |
| Module 11 - Good Clinical Laboratory Practice | | | | | | |
| Session 16 | <ul style="list-style-type: none"> - Be aware of the different areas in laboratory practices: pre-analytical, analytical and post-analytical - Recognize the application of GCP principles to practices in these areas - Define the key areas in assessing a laboratory for GCLP | <ul style="list-style-type: none"> - Definition, key principles, guidelines - Requirements: personnel, facilities, equipment, supplies and reagents, specimen management, specimen analysis, documentation, QC/QA | Interactive Power Point presentation / Field practicum | 120 | ppt as handouts / documents for field practicum | session 22b |
| Module 12 - Quality Management | | | | | | |
| Session 17 | <ul style="list-style-type: none"> - Define and recognize the quality systems in health and clinical studies - Apply the quality systems in the studies | <ul style="list-style-type: none"> - Concepts in quality management systems and their application in a clinical trial –SOPs, monitoring and audit - Audit vs. inspection - Preparing for audits - Most common audit findings - SOP: definition, applicability, design, control | Interactive Power Point presentation | 60 | ppt as handouts | session 22b and exercise session 18 |
| Session 18 | <p>Exercise</p> <ul style="list-style-type: none"> - Evaluate the potential risk to participants and develop methods/procedures to minimize those risks - Identify systems that enable application of good clinical research practices - Recognize the value of team work among stakeholders in a clinical research - Know the value of standardized procedures | <ul style="list-style-type: none"> - Identification of ethical justification and scientific validity, GCP issues (i.e., patient care and safety, and data quality) - Measures to minimize participant risk, ensure data quality and obtain study objectives following good research practices | Practical exercise through group activity | 45 | Documents of a study that has ended / Documents distributed day before | group presentation and discussion |
| Session 19 | <p>SOP writing workshop</p> <ul style="list-style-type: none"> - Hands-on experience in constructing - Develop draft SOPs for study and site-specific procedures | Application of Sessions 17 and 18 | Group work – list the necessary of SOPs and draft the SOPs | | Documents on Session 18 | group presentation and discussion |
| Module 13 - Quality of Monitoring | | | | | | |

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| Session 20a | Risk-based monitoring - Define risk at each monitoring activities - Use monitoring score calculator - Determine risk categories - Determine monitoring strategies | 1. Introduction to risk-based monitoring 2. Risk-based monitoring procedures 3. Risk-based monitoring component - Monitoring score - Decision tree for determining risk categories - Monitoring strategies | Interactive Power Point presentation | 60 | ppt as handouts / SCTO Platforms Guidelines for risk-based monitoring V 3.0 | session 22b and exercise session 21 |
| Session 20b | Monitoring of non-interventional human research | - Risk consideration - Planning of monitoring procedures - Monitoring procedures | Interactive Power Point presentation | 60 | ppt as handouts | session 22b and exercise session 21 |
| Session 21 | Exercise on risk-based monitoring | | Practical exercise | 90 | | |
| Module 14 - Quiz and course evaluation | | | | | | |
| Session 22a | Recap session | | | 30 | | |
| Session 22b | Test - Assess participants' comprehension of the principles of good clinical and their application in clinical studies - Gauge participants' knowledge of clinical studies management according to GCP - Measure participants' pragmatic application of GCP principles in given clinical trial situations | Multiple choice questions that cover above topics | 50-question test | 60 | Questionnaire | 80% passing score |
| Session 22c | Course evaluation - Feedback from the participants for future course improvement | | | 30 | Evaluation form | |