Session 1: Introduction to Systematic Reviews (1 Hour)

- Overview of Systematic Reviews (15 minutes)
  - Definition and importance
  - Differences between systematic reviews, literature reviews, and meta-analyses
- Steps in Conducting a Systematic Review (15 minutes)
  - Formulating a question
  - Literature search
  - Data extraction
  - Analysis and interpretation
- Introduction to PRISMA Guidelines (15 minutes)
  - Purpose of PRISMA
  - Key components
- Importance of Registering Systematic Review Protocols (15 minutes)
  - Explanation of what registration entails.
  - Discussion of databases like PROSPERO.
  - The importance of registering before starting the review.
  - How registration promotes transparency and prevents duplication.
- Q&A and Discussion (15 minutes)

Session 2: Registering Systematic Reviews (1 Hour)

- Introduction to Review Registration (15 minutes)
- Purpose and importance of registering systematic reviews.
- Overview of key databases/platforms (PROSPERO, Cochrane, OSF, etc.).
- Detailed Walkthrough of PROSPERO (20 minutes)
- Navigating the PROSPERO website.
- Step-by-step guide to registering a protocol: account creation, form filling, information required.
- Review and approval process.
- Other Registration Options (10 minutes)
- Brief overview of alternative platforms (e.g., OSF, Research Registry).
- When and why to consider these alternatives.
- Practical Exercise: Drafting a Registration (10 minutes)
- Participants work in groups to draft a mock registration based on a given scenario or their own projects.
- Encourage discussion on decisions related to protocol development.
- Q&A and Discussion (5 minutes)

Session 3: Conducting Systematic Literature Searches (1 Hour)

- Developing a Search Strategy (20 minutes)
  - Identifying keywords and databases
  - Boolean operators and search techniques
- Hands-on Activity: Building a Search Query (20 minutes)
  - Students practice creating search queries in small groups
- Evaluating Sources (10 minutes)

- Criteria for selecting relevant and credible sources
- Q&A and Discussion (10 minutes)

Break (15 minutes)

Session 4: Utilizing Reference Managers (1 Hour)

- Introduction to Reference Managers (20 minutes)
  - Purpose and benefits
  - Overview of popular tools (e.g., EndNote, Zotero, Mendeley)
- Hands-on Tutorial: Using a Reference Manager (30 minutes)
  - Demonstration of importing references, organizing, and citing
  - Students practice with a provided set of references
- Q&A and Discussion (10 minutes)

Session 5: PRISMA Guidelines in Detail (1 Hour)

- Deep Dive into PRISMA (30 minutes)
  - Going through the PRISMA checklist and flow diagram
  - Real-world examples
- Group Activity: Analyzing a Published Systematic Review (20 minutes)
  - Students critique a systematic review using PRISMA guidelines
- Q&A and Discussion (10 minutes)

Lunch Break (30 minutes)

Session 6: Introduction to Rayyan for Systematic Reviews (1 Hour)

- Overview of Rayyan (20 minutes)
  - Purpose and features
  - Comparison with other screening tools
- Hands-on Tutorial: Using Rayyan (30 minutes)
  - Creating a review, importing references, screening
  - Practical tips and tricks
- Q&A and Discussion (10 minutes)

Session 7: Writing and Publishing a Systematic Review (1 Hour)

- Structuring the Review (10 minutes)
  - Components of a systematic review
  - Writing style and clarity
- Publishing the Review (10 minutes)
- Selecting a journal
- Understanding peer review process
- Wrap-up and Final Q&A (10 minutes)