**Class Title:** Technical Writing

**Targeted Course Length:** 8 hours (approx. 4 hours lecture, 4 hours activities)

**Student to Instructor Ratio:** 15:2 preferred, 8:1 if necessary

**Objectives**

* Understand the importance of technical writing
* Understand the regulatory implications of technical writing
* Describe common pitfalls of technical writing
* Be able to create a technical documentation utilizing design principles
* Identify and utilize techniques to create functional and current documents
* Write with brevity, clarity, and active language

**Primary Audience:**  Production Associates, Supervisors, Quality and Management

**Prerequisites:** N/A

**Instructor Baseline SME:** Instruction for this course must have either professional experience in technical writing or have taken a certificate course.

**Standards (i.e. reference material):** 21 CFR

**Assessment (recommendation)** In-class exercises will be reviewed to assess understanding

**Outline**

1. Course Content
   1. Learning Objectives
2. Introduction
3. What is technical writing?
   1. Purpose of technical writing
   2. Examples
   3. Consequences of bad technical writing
   4. Benefits of good technical writing
4. Making reproducible, usable, living documents
   1. Design with the user in mind
   2. Clear language
   3. Reproducibility
   4. Ease of updating
   5. Time and date stamps
   6. Document traceability
5. Writing a technical document in 6 easy steps
   1. Identify the topic

Activity: Identify the topic in the paragraphs

* 1. Assess Audience and create docs that meet their needs: Grammar, word choice, clear communication, timeliness
     1. Write for your audience
     2. Jargon
     3. Clarity
     4. Brevity
     5. Fog Index
     6. Activity: Who is the audience in the following examples?
  2. Layout: Document design for functionality
     1. What do we mean by layout?
     2. Consistency
     3. Usability
     4. Headers
     5. Footers
     6. Margins
     7. Spacing
     8. Technical document formats
        1. Examples

5.3.9. Assignment:Take the BioNetwork quick reference card and organize the information in a clear and useful manner. Improve upon the current design.

5.4. Diagrams, graphics, and tables as tools for conveying information

* + 1. Pictograms
    2. Diagrams
    3. Building Tables
    4. Charts
    5. Graphics
    6. Assignment 2: Take the paragraph on the following slide and organize it into a table or graphic.
  1. Create an Outline
     1. Main topics, subtopics
     2. Organization and formatting
     3. Activity: outline the article
  2. Write from the outline
     1. Titles
     2. Accuracy, Brevity, Clarity
     3. Simplicity and brevity
        1. Avoiding cliches, stock phrases, redundancy, and jargon
        2. Sentence length
        3. Activity: rewrite the sentences to be concise
        4. Bullets and lists
        5. Activity: rewrite the paragraph as a list
     4. Paragraph Structure
     5. Transitions
  3. Grammar
     1. Idioms
     2. Subject & verbs
     3. Commonly misused words
     4. Plurals
     5. Pronouns and articles
     6. So, So that, and therefore
     7. Activity: Correct the grammar
     8. Voice
        1. Active and Passive
        2. Activity: Identify active and passive voice. Rewrite passive sentences.
     9. Punctuation
        1. Hyphens, commas, colons, and semicolons
  4. Read/Edit/Review
     1. Sit on it, read aloud
     2. Check for spelling and grammatical errors
     3. Common issues with computer spell check

1. **Assignment 3:** Create a root cause analysis report. Or Make an SOP style document for a simple common process (make coffee, popcorn, pb&j).