Techniques and Tools to Enhance your Scientific Writing Process
Universidade de Sao Paulo, Sao Paulo
July 3, 2013 – July 5, 2013

Instructor: Ethel Schuster, Ph.D.
e-mail: eschuster@necc.mass.edu

1. General Course Description

This course will introduce the student to the fundamentals of effective scientific writing in English. Topics include issues specific to scientific writing, including: components of a scientific paper, the underlying structure of a paper and its abstract, the language and style for communicating the ideas and research, and strategies for achieving the publication of the research. All topics related to publishing a scientific document from its conception to its completion will be covered: style, structure, and format of a scientific document, and the use of helpful tools. Using hands-on exercises, students will review examples of good and bad writing, suggestions for improving the writing and tips to facilitate the process.

Course Objectives

The purpose of this course is to teach effective scientific writing, for communication and publication. Upon successful completion of this course the student will:

- Understand the underlying structure of a scientific manuscript
- Understand the principles of good writing
- Identify good scientific documents
- Demonstrate confidence when writing a scientific document in English
- Express his/her own research ideas clearly
- Learn tips for cohesive and comprehensible writing styles
- Familiarize him/herself with existing tools for scientific writing
- Learn to annotate a corpus
- Learn to build his/her corpus
- Understand what it takes to write a successful scientific manuscript
- Become an effective scientific writer
- Successfully (hopefully) publish papers in English

Course Schedule

This is a tentative schedule for the week of July 3, 2013 to July 5, 2013. The goal of this course is to focus on techniques and tools. Students should come prepared to do part of the work in class.

Wednesday, July 3, 2013 (Morning)
1. Scientific writing: What, How, Why?
2. How is scientific writing different?
    a. Components
    b. Strategies
    c. Messages
3. Why need to write in English?
    a. English as the lingua franca
4. What makes it difficult for non-native speakers of English?
    a. Interference of the native language
    b. Language barriers – why non-natives find it so difficult
5. What resources are available to help
    a. Tools and other resources
6. How to READ a scientific paper?
    a. Suggested approach
    b. Parts to examine
    c. Advantages

Wednesday, July 3, 2013 (Afternoon)
1. Models for Annotating and using the structure of scientific papers
    a. What is annotation? How it can be done?
    b. What are the motivation and applications for annotating scientific papers
2. Building your own annotated corpus
    a. Learning by doing
        i. Step-by-step procedure to create a corpus for a specific area
    b. Annotation of your corpus
        i. Manual method
        ii. Automatic, using BLAST -- maybe?
    c. How does your annotated corpus look like?
        i. Sample corpus

Thursday, July 4, 2013 (Morning)
1. Web-based Tools for Scientific Writing
    a. How to use them? How they can help?
        i. SciPo-Farmacia
        ii. MAZEA-WEB
        iii.

Thursday, July 4, 2013 (Afternoon)
1. Corpus Linguistics and Tools to overcome the language barrier
    a. What makes a phrase or text adequate?
    b. How to recognize/write adequate text?
2. How to use tools that can help us write better text.
    a. Using COCA

Friday, July 5, 2013 (Morning) – Dr. Carmen Dayrell, guest lecturer
1. Instructional practices using corpus linguistics
2. The notion of textual patterns
    a. What are textual patterns? Why are they of special interest?
    b. Do novice and expert writers use similar patterns?
3. Identifying patterns in abstracts
    a. Stating the purposes of the study
    b. Presenting results
    c. Hands-on
        i. Identifying patterns in your own corpus
        ii. Diversifying patterns: Using COCA to search for variations within patterns
4. Identifying patterns in other sections of papers: introduction, gap, methods, discussion, conclusion
    a. Reference to the literature
        i. Introducing what is known about the topic: frequent patterns
        ii. Hands-on
            1. Identifying patterns in your own corpus
            2. Diversifying patterns: Using COCA to search for variations within patterns
            3. Citations: typical verbs

Friday, July 5, 2013 (Afternoon)
1. Your own papers
    a. Sample abstracts
    b. Introduction
    c. Other components
2. Specific Language Issues: English of Brazilian-Portuguese speakers