

# Schedule and Access Information for the ACeSYRI Research Methods 2022

## Organization

### Access

When?	MWF at 14:00-14:50
Where?	Online
How?	Zoom
Link:	Meeting ID: 915 7683 9018 Passcode: 572197
Style	50 min

## Course Information

### Prerequisites

This course is intended for third-year, fourth and graduate computer science majors with a thorough understanding of core concepts of Computer Science such as algorithm design, programming, data structures, performance analysis, computer networks and the organization of computer systems, and should possess mathematical maturity with working knowledge of calculus, discrete math, probability and statistics.

### Course Overview

The course will cover fundamental research skills such as:

- Topic selection
- Identification of authoritative sources
- Critical review and analysis of source material
- Technical writing
- Presentation preparation for conference venues
- Preparation of a survey paper in the IEEE publication format
- Ethical issues and professional guidance (ACM, IEEE, ITU, UN)

## Course Materials

Course materials, specific for the technical writing topic, include:

- Zobel, Writing for Computer Science, Third Edition, Springer, 2014
- Svobodova, et al., Writing in English: A Practical Handbook for Scientific and Technical Writers, Leonardo da Vinci Programme, European Commission.
- Lindsay, Scientific Writing = Thinking in Words, CSIRO Publishing, 2011

## Learning Outcomes

Students will learn the core skills required to conduct research investigations and communicate those results, and to do so in a manner consistent with professional society ethical guidelines. In so doing, students will learn how to recognize recent developments in the field, how to identify the relevant and authoritative sources, how to critically review those materials and prepare insightful and well-structured summaries that incorporate best-practices of technical writing, in a format suitable for professional publication. The student will demonstrate these skills through the preparation of a survey or research paper, in the IEEE conference format, and a corresponding presentation, which could serve as the precursor to the student's senior capstone project.

## Time Table

Date	Topic	Labs	Assignments	Practice
28.2	Introduction to technical writing	Latex Practice	Reading: Writing in English (Chap 1,2)	Compile your first latex document
7.3	Writing in English (Chap 1,2)	Lab: Group Critiques Paper summary	Reading: Zobel (Chap 2)	Prepare Abstract
14.3	Lecture Zobel (Chap 2)	Lab: Group Critiques Paper Review	Reading: Zobel (Chap 3)	Quiz 2
21.3	Spring Break			
28.3	Lecture Zobel (Chap 3)	Lab: Mutual Evaluation of Abstracts	Reading: Zobel (Chap 4)	Introduction
4.4	Lecture Zobel (Chap 4)	Lab: Mutual Evaluation of Introduction	Reading: Zobel (Chap 5)	Main Body
11.4	Lecture Zobel (Chap 5)	Lab: Mutual Evaluation of Main Body	Reading: Zobel (Chap 6)	Quiz 3, Conclusion