

## SE541: Research Methodology

Teaching Scheme			Credits	Marks Distribution				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE	CE	ESE	CE		
1	2	0	3	70	30	30	20	150

### Course Content:

Sr. No	Topics	Teaching Hrs.
1	<p><b><u>Introduction:</u></b></p> <p>Find what is expected of the you: Identify specific requirements for evaluation/review and what constitutes, completion of your work.</p> <p>Decide which sources you will need: Differentiate between journals, conferences, books, magazines and their Quality, Understand how to establish their quality and authenticity.</p> <p>Finding Information: How to conduct effective searches, How to find relevant papers related to your area of research, How to capture critical information.</p> <p>Identify main ideas in scholarly literature: Understand and identify the bias, theoretical position and evidence produced.</p> <p>Write notes to organize your ideas: Compare ideas and concepts from different papers.</p> <p>Ethical Issues related to Research: Plagiarism, Intellectual Property rights, Copyrights, Patent</p> <p>References: Understand the importance of distinguishing your work from others works and acknowledging such references, Learn international standards of referencing.</p>	04
2	<p><b><u>Focus To Problem &amp; Understand The Direction of Research:</u></b></p> <p>Identify Problem and Methods to Solve it: Analyze the question, Identify key areas in your field, Determine the nature and extension of papers that you should read.</p> <p>Identify the gaps: Learn to Critique existing knowledge and how to find the gap.</p>	04

Formulate the Problem Statement: Understand what should be the key aspects of your problem statement  
Examples of effective and ineffective Titles.

Validation: Identify problem and experimental/theoretical data for comparison with your model, learn how to extrapolate/scale data for validation, Find what acceptable level of error and justification thereof is.

3 **Publishing Research:**

04

Writing your Assignment: Identify the key features of any written work, Structure your assignment,

Build your argument: Recognize the importance of emphasizing your point ,Distinguish between your point and the evidence available, Acknowledge the evidence

Review and finalize your work: Know and follow the Process of reviewing and proof reading your work

Writing your Assignment: Identify the key features of any written work, Structure your assignment,

Build your argument: Recognize the importance of emphasizing your point ,Distinguish between your point and the evidence available, Acknowledge the evidence

Review and finalize your work: Know and follow the Process of reviewing and proof reading your work, Use feedback to improve your work

4 **Showcasing The Research:**

02

**Delivering Your Presentation**

Check the logistics of your presentation: Identify the key message of your presentation, Understand the expectations and what will be the key review points.

Develop the structure of your presentation: Understand the key components of an oral presentation, Know the usual structure of a good presentation.

Putting together the support material: Identify all the material you need to carry as supporting material.

Get feedback on oral presentation: Prepare for delivery of your Oral presentation, Rehearse and time your presentation.

Find what is expected of the you: Identify specific requirements for evaluation/review and what constitutes completion of your work.

Decide which sources you will need:

Differentiate between journals, conferences, books, magazines and their Quality; Understand how to establish their quality and authenticity.

Finding Information: How to conduct effective searches, How to find relevant papers related to your area of research, How to capture critical information.

Identify main ideas in scholarly literature: Understand and identify the bias, theoretical position and evidence produced.

Write notes to organize your ideas: Compare ideas and concepts from different papers.

Ethical Issues related to Research: Plagiarism, Intellectual Property rights, Copyrights, Patent.

References: Understand the importance of distinguishing your work from others works and acknowledging such references, Learn international standards of referencing.

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**Total Hrs.      14**

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**Reference Books:**

1. C.R. Kothari, "*Research Methodology: Methods and Techniques*", New Age Publishers.
2. R. Paneerselvam, "*Research Methodology*", PHI Learning Private Limited, Eight Printing 2010.