



## Course Description

**Institute:** Maritime Postgraduate Studies Institute

**Program:** Doctorate of Maritime Transport Technology

1- Course Data		
<b>Course Code:</b> MPI 801	<b>Course Title:</b> Research Methodology and Applications	<b>Academic :</b> 3Hrs.
<b>Specialization:</b> Common	<b>No. of Instructional Units:</b> 13	

<b>2- Course Aim</b>	The primary aims of this course are to develop a research orientation among the scholars and to acquaint them with fundamentals of research methods. Specifically, the course aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach. It includes discussions on sampling techniques, research designs and techniques of analysis.
<b>3- Intended Learning Outcome:</b>	
<b>a- Knowledge and Understanding, students will be able to:</b>	<ul style="list-style-type: none"> <li>• To develop understanding of the framework of research process.</li> <li>• To develop an understanding of various research designs and techniques.</li> <li>• To identify various sources of information for literature review and data collection.</li> </ul>
<b>b- Intellectual Skills, students will be able to:</b>	<ul style="list-style-type: none"> <li>• Graduates are scientifically competent in solving problems logically, analytically and creatively based on sound facts and ideas.</li> </ul>
<b>c- Professional Skills, students will be able to:</b>	<ul style="list-style-type: none"> <li>• To develop an understanding of the ethical dimensions of conducting applied research.</li> </ul>
<b>d- General Skills, students will be able to:</b>	<ul style="list-style-type: none"> <li>• Appreciate the components of scholarly writing and evaluate its quality.</li> <li>• Be familiar with the research project coordination and applications</li> </ul>
<b>4- Course Content</b>	<p><b>Week No.1</b> Introduction to research – The role of research, research process overview</p> <p><b>Week No.2</b> Philosophies and the language of</p>



	<p>research theory building – Science and its functions, what is theory? and The meaning of methodology</p> <p><b>Week No.3</b> Thinking like a researcher – Understanding Concepts, Constructs, Variables, and Definitions</p> <p><b>Week No.4</b> Problems and Hypotheses – Defining the research problem, Formulation of the research hypotheses, The importance of problems and hypotheses</p> <p><b>Week No.5</b> Research design – Experimental and Non-experimental research design, Field research, and Survey research</p> <p><b>Week No.6</b> Methods of data collection – Secondary data collection methods, qualitative methods of data collection, and Survey methods of data collection</p> <p><b>Week No.7</b> 7<sup>th</sup> Week Evaluation</p> <p><b>Week No.8</b> Attitude measurement and scaling – Types of measurement scales; Questionnaire designing – Reliability and Validity</p> <p><b>Week No.9</b> Sampling techniques – The nature of sampling, Probability sampling design, Non-probability sampling design, Determination of sample size</p> <p><b>Week No.10</b> Processing and analysis of data</p> <p><b>Week No.11</b> Ethical issues in conducting research</p> <p><b>Week No.12</b> 12<sup>th</sup> Week Evaluation</p> <p><b>Week No.13</b> Report generation, report writing, and APA format – Title page, Abstract, Introduction, Methodology, Results, Discussion, References, and appendices</p> <p><b>Week No.14</b> Research project generation, report writing, and APA format – Title page, Abstract, Introduction, Methodology, Results, Discussion, References, and appendices</p> <p><b>Week No.15</b> Final Evaluation</p>
<p><b>5- Teaching and Learning Methods</b></p>	<p>A mixture of lectures, tutorials, exercises, and case studies are used to deliver the various topics in this subject, some of which are covered in a problem-based format, thereby enhancing the learning objectives. Others are covered through directed study in order to enhance the students' ability of "learning to learn."</p>
<p><b>6- Teaching and Learning Methods for</b></p>	<p>A mixture of lectures, tutorials, exercises, and case studies are used to deliver the various topics</p>



<b>Students with Special Needs</b>	in this subject, some of which are covered in a problem-based format, thereby enhancing the learning objectives by using Office hours and Additional Follow up.
<b>7- Student Assessment:</b>	
<b>a- Procedures used:</b>	<ol style="list-style-type: none"> <li>1. Participation</li> <li>2. Assignments</li> <li>3. Presentations</li> <li>4. Case Study</li> <li>5. Quiz</li> <li>6. Written Exams</li> <li>7. Workshop</li> </ol>
<b>b- Schedule:</b>	Assessment (1) Mid Assessment (2) 12 <sup>th</sup> Assessment (3) 15 <sup>th</sup> .
<b>c- Weighing of Assessment:</b>	7 <sup>th</sup> Week Examination , 12 <sup>th</sup> Week Examination , Final-term Report Writing , Oral seminar exam , Practical Examination , Semester Work , Total 100%
<b>8- List of References:</b>	
<b>a- Course Notes</b>	<ul style="list-style-type: none"> <li>• Power point slides of lectures</li> <li>• Documents such as reports, case studies</li> </ul>
<b>b- Required Books (Textbooks)</b>	S. Rajasekar, (2013), "RESEARCH METHODOLOGY", Bharathidasan University, last viewed on the following web address: <a href="http://arxiv.org/pdf/physics/0601009.pdf">http://arxiv.org/pdf/physics/0601009.pdf</a>
<b>c- Recommended Books</b>	C.R. Kothari (2004), "Methodology – methods and techniques", Second revised edition, New Age international Publishers, Last viewed on the following web address: <a href="http://www2.hcmuaf.edu.vn/data/quoctuan/Research%20Methodology%20-%20Methods%20and%20Techniques%202004.pdf">http://www2.hcmuaf.edu.vn/data/quoctuan/Research%20Methodology%20-%20Methods%20and%20Techniques%202004.pdf</a>
<b>d- Periodicals, Web Sites, ..., etc.</b>	

**Vice Dean for Educational Affairs**  
Name & Signature:  
Date:20/1/2015

**Institute Dean**  
Name & Signature:  
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