## Research and Publication Ethics (RPE)

Objectives: 2 Credit course

- To understand the philosophy of science and ethics, researchintegrity and publication ethics.
- Toidentify researchmisconduct and predatory publications.
- To understand indexing and citation databases, open accesspublications, research metrics (citations, h-index, impact Factor, etc.).
- To understand the usage of plagiarism tools.
- At the end of thecourse the student willhave awareness about the publication ethics and publicationmisconducts

#### **Unit I: PHILOSOPHY AND ETHICS**

Introduction to philosophy: definition, nature and scope, concept, branches - Ethics: definition,moral philosophy, nature of moral judgements and reactions.

## **Unit II: SCIENTIFIC CONDUCT**

Ethics with respect to science and research - Intellectual honesty and research integrity - Scientific misconducts: Falsification, Fabrication and Plagiarism (FFP) - Redundant Publications: duplicate and overlapping publications, salami slicing - Selective reporting andmisrepresentation of data.

#### **Unit III: PUBLICATION ETHICS**

Publication ethics: definition, introduction and importance - Best practices / standards settinginitiatives and guidelines: COPE, WAME, etc. - Conflicts of interest - Publication misconduct:definition, concept, problems that lead to unethical behaviour and vice versa, types - Violation ofpublication ethics, authorship and contributor ship - Identification of publication misconduct,complaints and appeals - Predatory publisher and journals

#### **Unit IV: OPEN ACCESS PUBLISHING**

Open access publications and initiatives - SHERPA/RoMEO online resource to check publishercopyright & self-archiving policies - Software tool to identify predatory publications developedby SPPU - Journal finger / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer, Journal Suggester, etc.

## Unit VI: DATABASES AND RESEARCH METRICS

Databases (4 Hrs): Indexing databases, Citation databases: Web of Science, Scopus, etc. Research Metrics (3 Hrs.): Impact Factor of journal as per Journal Citations Report, SNIP, SJR,IPP, Cite Score - Metrics: h-index, g index, i10 Index, altmetrics.

### **References Books:**

- 1. BirdA, (2006), Philosophy of Science, Routledge.
- 2. American Educational Research Association (2011). Code of Ethics of AERA, Washington DC. AERA.
- 3. British Educational Research Association (2018). Ethical guidelines for educational research, London BERA.
- 4. Punch, Keith F (2013). Introduction to Social Research: Quantitative and Qualitative Approaches: SAGE Publications Ltd.
- 5. Strike, K.A (2006). The ethics of educational research in handbook of complementary methods in education research. http://www.rouledgehandsodes.com/doi/10.4324/978020387469. ch.3.
- 6. Jones, Julie Scott (2011). Research Ethics in Practice (Fundamentals of Applied Research): SAGE Publications Ltd

#### COURSE WORK FOR Ph.D.

#### K. SANKARESWARI

Reg: No: MKU22PFOS10364

**Assistant Professor of Computer Science** 

The American College, Madurai

Course-IV No. of Credits: 2

Title: RESEARCH AND PUBLICATION ETHICS (RPE)

## **COURSE OBJECTIVES:**

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- 3. British Educational Research Association (2018). Ethical guidelines for educational research, London BERA.
- 4. Punch, Keith F (2013). Introduction to Social Research: Quantitative and Qualitative Approaches: SAGE Publications Ltd.
- 5. Strike, K.A (2006). The ethics of educational research in handbook of complementary methods in education research.
  - $http//www.rouledgehandsodes.com/doi/10.4324/978020387469.\ ch.3.$
- 6. Jones, Julie Scott (2011). Research Ethics in Practice (Fundamentals of Applied Research): SAGE Publications Ltd

#### COURSE WORK FOR Ph.D.

## K. SANKARESWARI

Reg: No: MKU22PFOS10364

**Assistant Professor of Computer Science** 

The American College, Madurai

Course-I Core Subject No. of Credits: 4

Title: RESEARCH METHODOLOGY

## **COURSE OBJECTIVES:**

- To enrich the students about the basics of how research problems are defined, research methods are adopted and/or developed, research is undertaken and how research results are communicated to the peers.
- To have knowledge on data collection and analysis for the research methods, report writing and the remaining specific to the field of research methodology.

#### **Unit-IIntroduction**

Meaning, Concept, Nature, Steps, Types and Characteristics of research, Scientific Inquiry, Philosophical and Sociological foundations of research Interdisciplinary approach and its implications in various research area.

## **Unit-IIMethodsofResearch**

Qualitative and quantitative methods of research like Historical, case study, ethnography, exposit facto, documentary and content analysis, survey (Normative, descriptive, evaluative etc.) field and laboratory experimental studies, Characteristics of methods and their implications in research area.

## Unit-IIIDevelopmentofresearchproposal

Researchproposalanditselements,Formulation of research problem-criteria of sources and definition, Developmentofobjectives and characteristics of objectives,Developmenthypotheses and applications.

# Unit-IV Methods of data analysis

Analysis of qualitative data based on various tools, Analysis of quantitative data and it presentation with tables, graph setc., Statistical tools and techniques of data analysis measures of central tendency, dispersion, Decision making with hypothesis testing through parametric candnon-parametric tests. Validity and delimitations of research findings.

### **Unit-VReportwritingandevaluations**

Principlesofreportwritingand

guide lines according to style manuals, Writing and presentation of preliminary, main body and reference section of report, Picture and Graphs, Introduction to SPSS, Evaluation of research report.

## **Text Book:**

- 1. Kothari C.R., "Research Methodology, Methods and Techniques, Secondedition, (2008), New Age International Publication.
- 2. Festinger.L&D. Katz:ResearchMethodsinBehavioralScience.
- 3. Sellitz, Et Al: Research Methods in Social Relations.

## **Recommended Books**:

- 1. Krishna Swamy K.N., Siva Kumar A.I., Mathirajan M., "Management Research Methodology (2006), Pearson Education, NewDelhi.
- 2. Kothari C.R., "Research Methodology, Methods and Techniques, Secondedition, (2008), New Age International Publication.
- 3. RanjitKumar: Research Methodology, A step by step guide for beginners, Pearson Education, Sixth Edition2009.
- 4. Mark Saunders, Philip Lewis, AdrainThornhiu: Research Methods for Business Students, Pearson Education.
- 5. Ram Ahuja, "Research Methods", (2001), Rawat Publications, New Delhi.
- 6. Cooper D., Schindler P., Business research methods", (2003) Tata Mc-GrawHill, New Delhi.
- 7. Wilkinson&Bhandarkar:Methodology andTechniquesofSocialResearch.
- 8. PaulineVyoung:ScientificSocialSurveysandResearch.
- 9. Panneerselvam, R., Research Methodology, Prentice Hall Of India, New Delhi, 2004.