

Online Training Resources

Note: Research resources were identified through systematic internet searches for key terms related to writing research proposals, research methodology, and statistics for the social and applied sciences. The search was supplemented by manually sifting through websites references and links for further applicable resources.

This list of resources was created for the purposes of information sharing only. The websites below have only been minimally assessed for quality and accuracy. Where available, information about the website author is provided but readers are encouraged to visit the website to verify the authority of the information as they see fit.

The following list of resources is organized into three main sections. The first identifies resources for writing research proposals followed by a list of distance education courses in technical writing. The second section provides links to websites dedicated to research methodologies and research design. This section is further divided into general resources, qualitative resources, and quantitative resources, and is followed by a list of distance education courses in research methods. Finally, there is a section for help in statistics, which first lists online statistical resources and then a list of distance education courses in statistics.

Proposal Writing

General Recommendations

What to do before you Write a Grant Proposal - <http://literacy.kent.edu/Oasis/grants/first.html>

- Created by the Ohio Resource Learning Center at Kent State University
- A unique resource on how to approach the process leading up to proposal writing

How to Write a Research Proposal -

http://ic.daad.de/accra/download/How_to_write_a_research_proposal.pdf

- Written by Dr. Harold Olk
- 3 page PDF with tips on organizing one's thoughts before writing the proposal

Writing a good grant proposal - <http://research.microsoft.com/en-us/um/people/simonpj/papers/proposal.html>

- Written by Simon Peyton Jones and Alan Bundy
- This paper includes different sections on how to approach a proposal, criteria for high quality proposals, and common shortcomings of proposals

Twelve Steps to a Winning Research Proposal -

<http://www.mm.cs.sunysb.edu/300/lectures/proposal.pdf>

- Created by George Hazelrigg, National Science Foundation
- Helpful, common sense tips for writing a research proposal from an author who reviews them on a regular basis

Writing a Research Proposal –

<http://www.ruralhealth.unimelb.edu.au/pdf/Writing%20a%20research%20proposal.pdf>

- Created by Julie Pallant, University of Melbourne
- Power Point presentation with simple, straightforward slides that address each section of a proposal individually (e.g choosing a title, creating an abstract, describing the research plan, etc); a great overview of the process

Proposal Writing Short Course - <http://foundationcenter.org/getstarted/tutorials/shortcourse/index.html>

- Created by the Foundation Center – a nonprofit service that connects organizations with grant money with other nonprofits and supports them with tools and information
- 10 online sections that lead the writer through the entire process,, diagrams included
- Available in 3 different languages: English, French, and Spanish

Online Proposal Writing Course (OHCC & THCU) - <http://www.thcu.ca/ohcc-thcu-proposal-writing-course/>

- Created by the Ontario Healthy Communities Coalition and the Health Communication Unit
- 6 modules on writing a proposal; each includes a tutorial, worksheets, and 'how-to' tips

Grant Writing: Strategic Planning and Proposal - <http://www.casenet.org/program-management/resource-dev/gntwrite.htm>

- Created by Dr. David Rubenstein
- Asks specific questions to help direct researchers to information that should be included in the proposal

The Elements of a Proposal - <http://www.des.emory.edu/mfp/proposal.html>

- Created by Frank Pajares, Emory University
- An in-depth outline of what a proposal should look like, it includes 9 sections with several sub- and sub sub-sections

How to write a research proposal for peer review - <http://www.nrf.ac.za/yenza/pdf/pruprop.PDF>

- Created by the Population Research Unit at Rhodes University
- 13 page 'how-to' for writing a research proposal

Dissertation Workshop: Welcome -

<http://globetrotter.berkeley.edu/DissPropWorkshop/sitedescription.html>

- Created by Michael Watts, University of California Berkley
- Provides explicit advice on how to write a proposal, section by section
- Includes a sample timeline for writing sections and examples of proposals

Guide for Writing a Funding Proposal - <http://www.learnerassociates.net/proposal/>

- Created by Dr. Joseph Levine, Michigan State University
- Website broken up into different pages based on proposal sections, each has writing hints and an example

Excerpts from "How to Write a Research Proposal" -

http://www.aap.ucla.edu/mentoring/pdf/09_how_to_write_a_research_proposal.pdf

- Created by Dr. Paul Wong, Trinity Western University
- Organized by proposal section; concise, general

Grant Proposals - http://www.unc.edu/depts/wcweb/handouts/grant_proposals.html

- Created by the University of North Carolina
- Covers the whole process of grant writing, including an overview of the process

The Wenner-Gren Foundation: News: Advice on How to Write a Grant Proposal -

http://www.wennergren.org/news/news_show.htm?doc_id=510785

- Created by Sydel Silverman, President Emeritus of the Wenner-Gren Foundation
- Paper that was published in *Current Anthropology* in 1991
- Comprehensive resource that provides a good explanation of the funding process

How to write a competitive grant proposal - <http://www.vchri.ca/i/presentations/Reiner/index.htm>

- Created by Dr. Neil Reiner – University of British Columbia
- Power Point presentation on the process, structure, and evolution of a research proposal

The Proposal in Qualitative Research - <http://www.nova.edu/ssss/QR/QR3-1/heath.html>

- Written by Dr. Anthony W. Heath
- Paper was published in *The Qualitative Report* in 1997
- Short outline of how to write a research proposal specifically for qualitative research

Ryerson University Library – Research Grants and Thesis Proposals – Research Proposal Writing -

<http://www.ryerson.ca/library/subjects/grants/proposal.html>

- A compiled list of approximately 30 different sites on how to write grant proposals from universities and other reputable sources in North America

How to Write a Grant Proposal - <http://www.mahalo.com/how-to-write-a-grant-proposal>

- Author of site not stated
- Step-by-step instructions for writing a proposal; very organized

University Level Distance Education Courses in English/French Composition

Course Title	Number	Institution	When Offered	Delivery Mode
Composition 1	ENGL1213	Acadia	Open	Print and Online
Composition 2	ENGL1223	Acadia	Open	Print and Online
Writing and Reading Critically 1	ENGL1413	Acadia	Open	Online
Writing and Reading Critically 2	ENGL1423	Acadia	Open	Online
Reading and Writing Critically	ENGL1406	Acadia	Open	Print and Online
Grammar *Non-credit Course	ENGL140	Athabasca	Monthly	Print
Writing for Academic Purposes*Non-credit	ENGL143	Athabasca	Monthly	Print
Reading for Academic Purposes*Non-credit	ENGL146	Athabasca	Monthly	Print
Developing Writing Skills*Non-credit	ENGL155	Athabasca	Monthly	Print
Academic Reading and Writing in English	ENGL1540	Laurentian	May-July/Sept.-Apr.	Print and Computer
Grammaire et redaction	FRN-1900	Laval		Online
Technical Writing	ENGL301	UBC	Sept.-Dec./Jan.-Apr.	Online
Introduction to Academic Writing	ENGL109	UWaterloo	Sept.-Dec./Jan.-Apr./May-Aug.	Print and audio CD or Online

Research Methodologies and Research Design

General Resources

WWW Research Methods Tutorial - <http://sociology.camden.rutgers.edu/jfm/tutorial/main.htm>

- Created by a Jon'a Meyer, Rutgers University
- Goes through simple tutorials one by one: What are research methods, Common errors made in research, Some early steps in research (great!), and Variables and relationships

Research Methods - http://www.mcli.dist.maricopa.edu/proj/res_meth/index.html

- Created by Maricopa Center for Learning and Instruction, which is a combined effort of several colleges in the US
- Provides access to the Research Methods Lab, which is a user-friendly computer program that goes through five different research methods (experimental, correlation, naturalistic observation, survey, and case study) and describes how method is used along with strengths and limitations
- Allows user to practice what he/she has learned, and also has a post-test section

Research Methods Tutorials - <http://www.socialresearchmethods.net/tutorial/tutorial.htm>

- Created by graduate students in Program Evaluation and Planning at Cornell University
- Several different modules on topics in research methods including: Layman's guide to social research methods, steps for successful policy analysis, you're the evaluator, validity, concept mapping, epidemiology, qualitative research methods, threats to validity, sampling procedures, measurement & construct validity, design and internal validity, etc. and many more

Questionnaires and Surveys – A Free Tutorial - <http://www.statpac.com/surveys/index.htm#TOC>

- Created by StatPac Inc - professional survey software authors
- Can be downloaded in PDF or DOC format, or can be viewed online in smaller portions
- Long – but comprehensive – more of a textbook chapter

Questionnaire Design and Surveys Sampling - <http://home.ubalt.edu/ntsbarsh/stat-data/Surveys.htm#rsi>

- Created by Dr. Hossein Arsham, Merrick School of Business, University of Baltimore
- Similar to an online textbook – there is a menu with 16 different chapters related to this topic

Reducing Errors in Mail Surveys. Cui, Wei Wei - <http://pareonline.net/getvn.asp?v=8&n=18>

- Reprint of a journal article by Wei Wei Cui published in 2003 in *Practical Assessment, Research & Evaluation* on how to reduce errors in mailed surveys

SUNY Downstate EBM Tutorial - <http://library.downstate.edu/EBM2/contents.htm>

- Created by the Medical Research Library of Brooklyn
- Focus is on "Evidence Based Medicine"
- Helps practitioners frame their question, define the process through which it can be answered, decide what information needs to be collected, and discusses how the data should be analyzed
- Excellent introductory resource

Social Research Update - <http://sru.soc.surrey.ac.uk/>

- Published quarterly by the Department of Sociology at the University of Surrey
- Each publication focuses on a different aspect of social research
- 55 topics to date; each is thorough and includes references

Social Research Methods - <http://www.socialresearchmethods.net/>

- Author is not stated, but several references are used
- Provides 4 useful tools: Online research methods textbook; Online statistical advisor that selects the tests required to analyze the data; Online manual and computer simulation for research designs to see how simple simulations work; Resource guide for concept mapping

Films for the Humanities and Sciences – Research Methods in the Social Sciences -

http://ffh.films.com/id/12805/Research_Methods_in_the_Social_Sciences.htm

- 4-part series that explores qualitative and quantitative research methods using psychology as a background discipline. Each video is between 23-46 minutes.
- VHS/DVDs cost US\$399.80

School of Library, Archival and Information Studies – UBC -

http://www.slais.ubc.ca/RESOURCES/research_methods/case.htm

- Created by Dr. Mary Sue Stephenson
- List of internet resources on 21 different research methods topics
- No longer being updated (last updated 2007), so some links may be broken

Qualitative Resources

Focus Groups – Articles by Tom Greenbaum of Groups Plus -

<http://www.groupsplus.com/pages/articles.htm>

- Reprint of articles written by Tom Greenbaum
- Approximately 30 published journal articles on how to conduct focus groups

Quantitative Methods in Public Administration: Focus Groups -

<http://faculty.chass.ncsu.edu/garson/PA765/focusgroups.htm>

- Created by Dr. David Garson, North Carolina State University
- Fundamental information on how to conduct a focus group (approximately one page long)

Web Links - International Institute for Qualitative Methodology – University of Alberta -

<http://www.uofaweb.ualberta.ca/iqmq/Links.cfm>

- Created by the University of Alberta
- List of approximately 30 Links to tutorials and websites designed to help user understand qualitative research methods

Quantitative Resources

Statistical and Research Methods Workshops -

http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/resch_wrk.html

- Created by Wadsworth Cengage Learning
- 20 different modules on research methodology
- Very comprehensive and interactive (delivers a small amount of information to the user per page and also tests user on knowledge accumulation periodically)
- Also has statistical workshops created in a similar format (18 modules)
- Written for psychologists

Research Methods and Statistics - http://psych.athabascau.ca/html/aupr/tools.shtml#General_links

- Created by the Centre for Psychology Resources at Athabasca University
- Provides links to websites that offer help on research methods and statistics topics

University Level Distance Education Courses in Research Methods

Course Title	Number	Institution	When Offered	Delivery Mode
Research Methods in the Social Sciences	SOSC366	Athabasca	Monthly	Printed
Du Methodes Statistiques en Sante Du Methodes Statistiques de regression en epidemiologie Du Methodes en recherche clinique Du Communication medicale scientifique	http://ead.isped.u-bordeaux2.fr/	Institut de la Sante Publique, d'Epidemiologie et de Developement	Annually – each takes about 100 hours to complete	Online
Epidemiologie appliquée et approche populationnelle	EPM-6900	Laval		Online
Methods of Nutrition Research	GAHN6608	Mount St. Vincent		TV/Video
Applied Research Methods and Evaluation	CFNY405	Ryerson	Fall/Winter	Online
Methode de recherché en sciences humaines et sociales	EDP1001D	Universitie de Montreal		Online

Online Statistics Resources

General Resources

A Brief Introduction to Probability and Statistics by Josh Deutsch - www.statistics-help-online.com

- Created by Josh Deutsch
- Online introductory statistics textbook

HyperStat Online: An Introductory Statistics Textbook and Online Tutorial for Help in Statistics

Courses - <http://davidmlane.com/hyperstat/>

- Created by David M. Lane, Rice University
- Online instructional demonstrations of 42 different statistical concepts
- Includes a glossary, list of free downloadable statistical analysis programs for statistical tests, and teaching software through simulation
- Also has 'Stats Notes', which are packages put together by staff that discuss statistics needed for different types of studies (e.g. meta-analyses, factor analysis, and linear regression)
- Also includes a place where the user can ask staff a question for free

The Statistics Homepage - www.statsoft.com/textbook/Stathome.html

- Created by StatSoft Inc. (1984-2008)
- Online statistics textbook that includes figures and examples, but no practice problems
- The website is searchable, comprehensive, and introductory-level

A New View of Statistics - <http://www.sportsci.org/resource/stats/index.html>

- Created by Will G. Hopkins, Professor of Sport Science at AUT University, Auckland
- Online tutorial; difficult to navigate but thorough
- Divides information into summary data and how and when that data can be generalized to a larger population

Stat Trek: Teach yourself statistics - www.stattrek.com

- Created by StatTrek
- Contains 2 online introductory statistics tutorials
- Provides several online statistics tables, tools, and calculators that are programmable to do tests for the user
- Also has a sample planning wizard to help tailor a sampling plan and estimate population parameters
- Based on user's input, program will create a summary report that 1. Presents key findings, 2. Offers suggestions for improvement, and 3. Describes the methodology used to solve the problem *Must register to use this application - \$10/month

MeanDeviation – statistics and related algorithms statistics - <http://www.meandeviation.com/>

- Created by Alan Dix, Lancaster University, UK
- Online statistics tutorial, notes to help interpret the tutorial, and 7 common errors in statistics, plus demonstrations

The Free Statistics Calculators Website - <http://www.danielsoper.com/statcalc/>

- Created by Daniel Soper – California State University
- 89 statistics calculators for 21 different statistics categories

GraphPad QuickCalcs: free statistical calculators - <http://www.graphpad.com/quickcalcs/>

- Author not stated
- Simple, step-by-step selection process to help direct the user to the most appropriate statistical test

Free Online Course Materials Courses MIT OpenCourseWare -

<http://ocw.mit.edu/OcwWeb/web/courses/courses/index.htm#Mathematics>

- Course information (lecture notes, etc.) from the Michigan Institute of Technology
- Two courses for "Statistics for Applications", also "Nonparametrics and Robustness", "Statistical Learning Theory", "Mathematical Statistics"
- Very thorough, but some segments are quite advanced

Alliance of Statistics Consultants – Statistics Help for Students & Businesses -

<http://www.statisticstutors.com/links.html>

- Provides extensive links to other internet resources for several different statistical topics
- Some links are broken
- Provides resource to consult with someone regarding statistical problems for a fee

Raynald's SPSS Tools - <http://www.spsstools.net>

- Created by Raynald Levesque, an actuary from Montreal
- Site dedicated to understanding and improving productivity with the Statistical Package for the Social Sciences (SPSS)
- Lots of excellent information on basic SPSS applications under the FAQ section

Free College Math Help Videos in Statistics – Math Help and Homework Help online by MathVids.com - www.mathvids.com/topic/mathhelp/16-statistics

- 10 videos presented by professor Kent Murdick from the University of South Alabama
- Must register before use, but there is no registration fee

University Level Distance Education Courses in Statistics

Course Title	Number	Institution	When Offered	Delivery Mode
Introduction to Statistics	STAT2126	Laurentian	May-July/Sept.-Dec.	Online
Introduction to Statistics	STAT2126	Laurentian	May-July/Sept.-Dec./Jan.-Apr.	Print
Probabilites et statistique	STT-1000	Laval		Online
Epidemiologie et biostatistiques	EPM-1901	Laval		Online
Statistics I	2500	Memorial	Fall	Online
Technical Statistics	MATH1257	Nipissing	Spring/Summer	Online and Prof
Introduction to Statistics	STAT263	Queens	Winter/Spring-Summer	Online
Advanced Statistical Methods	CKQA558	Ryerson	Sept.-Dec/Jan.-Apr./May-Aug.	Online
Statistical Process Control	CKQA557	Ryerson	Sept.-Dec/Jan.-Apr./May-Aug.	Online
Basic Statistical Analysis 1	STAT1000	UManitoba	Fall/Winter	Online
Basic Statistical Analysis 2	STAT2000	UManitoba	Winter	Online
Elementary Statistical Techniques	STAT2044	UNB	24/7	Multimedia
Introduction to Statistical Methods 1	STAT220	UWaterloo	Jan.-Apr.	Print and audio CD
Introduction to Statistical Methods 2	STAT221	UWaterloo	Sept.-Dec.	Print and audio CD
Social Statistics	ISS250R	UWaterloo	Sept.-Dec.	Print and audio CD
Elementary Statistics	135	UWO	Spring/Summer	Online

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