

DePaul University, School for New Learning – LL 300 RESEARCH SEMINAR

Innovation



Winter Quarter 2010

O'Hare
Campus

Tuesdays

(1/5/10 – 3/9/10)

6:30-9:30 PM

Faculty: Kevin F. Downing Ph.D.

Contact Information:

Office hours:

By appointment.
227C, O'Hare Campus

Primary Communication Address:

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Note: E-mail is my primary means of communication with students. Phone messages will not be reviewed everyday.

Competencies Offered: L8 and L9

Course Description: Research Seminar is an introductory course in research design and analysis. The course advances the development of critical thinking skills and explores applied methods of qualitative formal inquiry as preparation for lifelong independent research. This section of Research Seminar will be taught around the general topic of ***Innovation***. Students will select a specific issue/problem corresponding to their interests in this area and develop a formal research proposal. Where suitable, students may use this Research Seminar to begin to explore aspects of their Advanced Project in coordination with their academic committee. The research proposal is the primary document produced and assessed in Research Seminar.

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Learning Experience: Through group discussions, readings, lectures, and independent investigation, students will be introduced to formal methods of inquiry. Students will apply this learning to develop a research question, undertake a comprehensive search for information, critically evaluate the previous work of others, and propose an original plan (i.e., grant proposal) for researching the question. Along with learning about research design and analysis, students will also be introduced to the chief issues concerning innovation.

Note: Research Seminar is a time intensive course for students, particularly in the first seven weeks. **In order to do very well in Research Seminar, students should be prepared to set aside 10 hours for outside-of-class research and writing per week.**

Required Textbooks:

- 1) *Writing Successful Science Proposals* by Andrew J. Friedland, Carol L. Folt
Paperback: 224 pages **Publisher:** Yale University Press; 2 edition (June 9, 2009)
ISBN-10: 0300119399 **ISBN-13:** 978-0300119398
- 2) *The Myths of Innovation* (Hardcover) by Scott Berkun
Hardcover: 192 pages **Publisher:** O'Reilly Media, Inc.; 1 edition (May 15, 2007)
ISBN-10: 0596527055 **ISBN-13:** 978-0596527051
- 3) Additional Readings, Handouts, and or Online Resources will be provided on the course's **Blackboard Website.**

Competencies Offered:

L8: Can pose questions and use methods of formal inquiry to answer questions and solve problems.

L9: Written by student

EXAMPLES:

L9 Can produce a thorough and critically developed research plan to investigate a hypothesis concerning a social, political, legal, historical, or economic question pertaining to innovation.

L9 Can produce a thorough and critically developed research plan to investigate a scientific hypothesis concerning innovation.

L9 Can produce a thorough and critically developed research plan to investigate a hypothesis concerning an arts, humanities, or leisure question pertaining to innovation.

ASSESSMENT:

Research Seminar is offered for **Pass/Fail** or for a **Grade**. You must request the grade option formally in writing to the instructor by the second session of the course or you will be assessed according to the Pass/Fail criteria. To receive a 'Pass' grade, you must exceed the standards of the 'D' grade described herein.

For all competencies: 1) demonstration of **understanding and application of concepts** of formal inquiry, 2) completion of a first and final draft of an **original research proposal** focusing on problematic issue regarding innovation, 3) adherence to the proposal format specified by the instructor, 4) short (8-10 minutes) oral

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presentation of the research proposal during one of the last two sessions, and 5) preparation for and participation in class discussions.

EVALUATION METHODS:

Although this course is default Pass/Fail the proportionality of assignments is as follows:

- 1. Participation in discussions/Attendance 20%
 - 2. Supplementary Assignments 10%
 - 3. Original research proposal assignments a) **written portion....** 60%
 - Hypothesis question, References, Outline, and 1st Draft (20%)
 - Final Draft (40%)
- b) **oral presentation of research** 10%

Grade Option Assessment:

Proposals and Proposal discussions will be evaluated as follows:

A= denotes work of high quality; reflects thorough and comprehensive understanding of the issues at hand; reflects a clearly identifiable thesis and argument that demonstrates cogent and creative development and support of idea. This includes: use and integration of high quality peer reviewed sources, development of an original research question situated in the reviewed scholarly research, development of a methodology to achieve the research question, clear statement of need for research, and concise explanatory presentation of the proposed research to an audience.

B= denotes work of good quality; reflects clearly organized and comprehensive understanding of issues at hand; presents substantive thesis and argument with evident development and support of ideas.

C= denotes work which minimally meets requirements set forward in assignment; reflects some organization and development of ideas but develops argument in superficial or simplistic manner; may only address part of the assignment or be otherwise incomplete.

D= denotes work of poor quality which does not meet minimum requirements set forth in the assignment; demonstrates poor organization of ideas and/or inattention to development of ideas, grammar, and spelling; treatment of material is superficial and/or simplistic; may indicate that student has not done reading assignments thoroughly.

POLICIES

CLASSROOM ENVIRONMENT

College is a special time to exchange ideas with fellow students and instructors. It is natural that individuals may disagree from time-to-time about topics/issues raised in a course. The instructor seeks to promote a vigorous exchange of ideas but requires that students do this in a respectful manner. For the courtesy of your fellow classmates, please turn-off your cell phone and do not eat food in the classroom. A break will be provided approximately at the middle of each session.

INSTRUCTOR'S ATTENDANCE POLICY

Attendance is mandatory and essential for success in Research Seminar. Two or more unexcused sessions missed will result in a "fail" grade for Research Seminar, not an "incomplete". The instructor should be notified of the circumstances for all absences prior to the class session. Class

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materials for sessions missed can be obtained on the Blackboard website for the course. **No** graded work or handouts will be FAXed to students.

ACADEMIC INTEGRITY POLICY

The instructor follows DePaul's policy on Academic Integrity on matters of student conduct including issues of plagiarism. (Please see the student handbook for details at the DePaul website). Avoiding plagiarism is particularly important in Research Seminar because of the extensive use of other people's research and ideas. This course regularly utilizes the Turnitin© plagiarism detection software.

For more information see:

<http://www.snل.depaul.edu/StudentResources/Policies/Handbook/GResearch.asp>

ELECTRONIC SUBMISSIONS POLICY

It is acceptable to submit drafts of work as e-mail attachments. Submissions should be sent in the Word format. The final draft of your research proposal must be turned in as both a hard copy and an electronic copy.

INCOMPLETE GRADE POLICY

Students are expected to finish the assignments of their courses in a timely manner. It is at the full discretion of the instructor whether a student shall be granted an incomplete grade in this class with the possibility of extended time for completion of class assignments. In order for a student to have an incomplete grade granted in this course, there must be a significant extenuating circumstance evidenced by the student (e.g., medical and/or significant personal issues). As most students encounter pressures from work, elevated professional demands will not be grounds for an incomplete grade. Students will need to initiate and file an SNL Incomplete grade contract before the end of the ninth session to receive an incomplete grade including the date for completion of all class assignments. Students must also submit the signed copy to the Grades Coordinator for inclusion in their master file. The instructor will decide the duration of the extension granted by an incomplete.

WITHDRAWAL POLICY

In the rare instance where you may need to withdraw from the course, please review the University's policy on withdrawing to avoid financial penalties and adverse implications to your grade point average.

PROTECTION OF HUMAN SUBJECTS IN RESEARCH

Demonstrating competence sometimes involves human interactions, including interviewing and or observing people outside of the course, discussing those interactions with class members and reporting on the interactions in written format(s). As such, these interactions qualify as human subjects research and are subject to University and Federal guidelines. Research which takes place in the context of this course is exempt from approval by the School for New Learning's Local Review Board *only under the following conditions*:

1. The data collected is *exclusively* for the purpose of class discussion and may not be used for any other purpose, whether during the course or at any time afterwards. If there is any possibility that the data could be used in further research or for publication, then students must obtain approval from the Local Review Board before beginning.

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2. Students assess the risk of harm to the individual, whether physical, mental or social, and ensure that no harm does or could result from interviews, observations, discussion and/or reports.
3. The privacy and confidentiality of those interviewed, observed, or discussed in the course are protected. Unless the student receives written permission from an individual to use the individual's name, all names should be changed or eliminated, ensuring that identity cannot be determined from the data provided.

Written permission can be secured only through an *Informed Consent document*, which your instructor will help you develop, if appropriate. For more information see: <http://research.depaul.edu/>

FOR STUDENTS WHO NEED ACCOMMODATIONS BASED ON THE IMPACT OF A DISABILITY

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter, preferably within the first week of class, and make sure you have contacted:

- PLuS Program (for LD, AD/HD) at 773-325-4239 in the Schmidt Academic Center, room 220 or;
- The Office for Students with Disabilities (for all other disabilities) at 773-325-7290, DePaul University Student Center, room 307.

CHRONIC ILLNESS INITIATIVE

The Chronic Illness Initiative (CII) provides access to higher education for students disabled by chronic illnesses that unpredictably increase and decrease in severity such as chronic fatigue syndrome, rheumatoid arthritis, lupus or illnesses requiring frequent hospitalizations. At SNL, staff and faculty are compassionate and committed to helping CII students achieve their educational goals. Contact CII at CII@depaul.edu.

WRITING HELP

For help with organizing your ideas, grammar, citing sources, avoiding plagiarism, sample SNL assignments and much more, see the [Writing Guide for SNL Students](http://snl.depaul.edu/writing/index.html) at <http://snl.depaul.edu/writing/index.html>. For on-campus and online tutoring, see the [DePaul University Writing Centers](http://condor.depaul.edu/~writing/) at <http://condor.depaul.edu/~writing/>.

[In addition, consider adding the Writing Centers' syllabus supplement available here <http://condor.depaul.edu/~writing/html/fac/supplements.html>]

SCHEDULE

Topics, Readings, and Assignment Deadlines:

NOTE: Readings should be completed before the class session with which they are listed.

Session 1 Introduction to Research Design and Analysis & Research Issues

Course Requirements and Expectations
What is a research proposal?
Formulating a research question/focusing your topic
Introduction to Innovation I.

Session 2 Finding the information/evidence required for your research

The Library
Taking notes as you proceed through your research
Introduction to Innovation II.

Assignment 1: Review the following websites or similar ones and develop a list of 3 research questions in Science-Technology, 3 in Business, and 3 in the Social Sciences

<http://www.technologyreview.com/>

<http://www.businessweek.com/>

<http://www.bls.gov/>

<http://www.asap-spssi.org/>

Assignment 2:

Read Chapters 1-5 in Friedland and Folt
Read Chapters 1-3 in Berkun

Review the Website:

<http://www.scholarshipnet.info/scholarship-tips/how-to-write-a-research-proposal-1/>

Assignment 3: Turn in Your Initial Proposal Topic Area and List of Possible Research Questions

Session 3

INDIVIDUAL MEETINGS 3:30- 8:30PM

No Formal Class Meeting- Meet at me at your designated time.

Assignment 4:

Read Chapters 6-8 in Friedland and Folt
Read Chapters 4-6 in Berkun

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Session 4

Writing Your Research Proposal

Formats for Proposals

How to incorporate evidence/avoiding plagiarism/documenting your sources

Verification/Handling Ideas

Group Exercise: Incorporating Evidence with Respect to a Hypothesis

Assignment 5:

Read Chapters 9-12 in Friedland and Folt

Read Chapters 7-8 in Berkun

Assignment 6: Turn in a Copy of the Initial Scholarly References for your Proposal (Minimum of 4 annotations). This should be done in an annotated bibliography format with the reference cited consistently in an APA or MLA style. For help see:

<http://owl.english.purdue.edu/owl/resource/560/01/>

<http://www.writing.utoronto.ca/advice/specific-types-of-writing/annotated-bibliography>

Session 5 Quantitative Research/Sampling

Assignment 7: Turn in a Copy of the Outline of Your Proposal

Assignment 8:

Read the “Introduction to Statistics” section of the Hyperstat website at:

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

Read Chapters 9-10 in Berkun

Session 6 Research Ethics and Small group discussions of first draft proposals

Research Ethics/Human Subjects Research and Training

Assignment 9: Finish the last chapters Friedland and Folt

Optional Assignment: 40 minute HSR Training at: <http://phrp.nihtraining.com/users/login.php>

Assignment 10: Turn in a Copy of the First Draft of Your Proposal

Include an Improved Reference List (No Annotations this time)

Session 7 Peer Review and Preparing for your presentation

Additional Research Design and Analysis Issues

Peer Review of Proposals (**Bring 2 hardcopies of your proposal**)

Assignment 11: Turn in a Copy of the First or Second Draft of Your Proposal

Session 8 **SMALL GROUP** Research Consultations (approx. 6:00-8:00PM): Working Towards the Final Draft. Meet at the room at the designated time for your group.

Individual meetings per request (8:00-9:00)

Assignment 12: Forward an electronic version of your proposal draft for TURNITIN© Review

**Sessions 9 and 10 Student Presentations of their Research Topic and Research Process
Summary/Wrap-up/Celebration**

Assignment 13: Prepare for the oral presentation of your research including developing the required handout.

Assignment 14: Turn in a Copy of the Final Draft of Your Proposal

Assignment 15: Complete a Final Self-assessment for Research Seminar

About the Instructor:

Kevin F. Downing, Professor – DePaul University



Dr. Downing is a Professor at DePaul University's college for adult learners, the School for New Learning. His research interests include the investigation of Miocene fossil mammals, the record of stratigraphic and paleogeographic change during the Himalayan Orogeny, and online science learning practices. He is the co-author of the recently published book, *Online Science Learning: Best Practices and Technologies*.

Degrees: B.S. degrees in Astronomy and Geology (University of Illinois-Champaign), M.S.T. in Geology (University of Florida-Gainesville), and Ph.D in Geosciences/Evolutionary Biology and Ecology (University of Arizona, Tucson)

Areas of Specialization and Research: Paleobiology, Geology, Science Education.

