

GEN ST 391 – RESEARCH EXPOSED! : APPROACHES TO INQUIRY

AUTUMN QUARTER 2008

SLN: 13950 D

September 24th – December 3rd, 2008; W 12:30 -1:20 p.m.

Electrical Engineering Building 125

Course website: <http://www.washington.edu/research/urp/courses/researchexposed/autumn08.html>

Syllabus

Co-Facilitators: Janice DeCosmo, PhD, Director, Undergraduate Research Program; Associate Dean of Undergraduate Academic Affairs
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Jill McKinstry, Director, Odegaard Undergraduate Library
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Teaching Assistant: Jessica Salvador, Graduate Staff Assistant, Undergraduate Research Program
dearjess@u.washington.edu, Telephone: (206) 616-2168

Jessica's Office Hours for Autumn Quarter: **Wednesdays: 2:00-4:00 PM & Thursdays: 10:00am-12:00noon**, or by appointment, MGH 120

Assignment Details

We encourage you to attend all lectures and take notes during each lecture, in order to be best prepared for your final quiz.

Go Post Message Board

The Go Post message board is a space for students in Research Exposed! (GEN ST 391) to share with each other resources, information, experiences, and questions about the topics covered by faculty from a wide variety of disciplines. Our goal is that the message board will enhance your experience and provide an extension of your learning from the lectures. Each week 1-2 questions from the handouts will be selected as discussion questions. At the end of the course, half of the questions from the quiz will be questions that were used on the message board and the other half will be questions that were not used on the message board but that are still part of the handouts.

Your participation on Go Post is required at least once during the course. This may be in response to the discussion questions or you may add resources that you come across and are relevant to one of the course's speakers. Please make sure that all entries are collegial and respectful of one another and the speakers' expertise in the field. In other words, refrain from writing anything that you otherwise wouldn't say in front of the speaker. Please refer to the Go Post for reminders on appropriate usage of the message board. If your entry is removed due to inappropriate use of the message board, it will not count as a completed entry.

Final Quiz

The handouts each week are intended as guides for you to prepare for the final quiz and will not be collected. The final quiz will consist of 10 questions selected from the collection of questions given by each presenter. You will not know in advance of the quiz, which questions will appear on the final exam.

Earning Credit

To earn the credit for the course, you need to do both of the following:

1) Post on the GoPost message board at least once.

AND

2) Pass the final quiz. To pass this course, you will need to answer correctly 7 of the 10 questions on the quiz.

Descriptions

September 24th – Jennifer Harris, Associate Director, URP & **Jessica Salvador**, Graduate Staff Assistant, URP,

"Getting Involved in Undergraduate Research"

The Undergraduate Research Program (URP) promotes and facilitates opportunities for undergraduates to participate in research with faculty, provides a public forum for students to present their work, and offers advising and other resources. The URP seeks to enrich the learning experiences of both students and faculty by encouraging undergraduates to become involved in the knowledge-making process at the UW. The URP website (<http://www.washington.edu/research/urp/>) offers advice, current research project opportunity postings, and links to other research programs and information.

The Odegaard Undergraduate Library and Learning Commons provides a host of support services for undergraduate research. The OUGL website (<http://www.lib.washington.edu/ougl/>) provides links to the Media and Writing Centers, and information on computing resources, the Library Research Award, workshops, reserving study rooms, and more.

October 1st – Sameer Honwad, Graduate Student, Science Education & Instructional Systems and Researcher, Pennsylvania State University.

"The Mountain Project: Building Learning Communities for Himalayan Sustainability"

Sameer Honwad is a Graduate Student and Researcher at the Design Of Learning Collaboration and Experience Lab (dolcelab) at Pennsylvania State University and was a Graduate Intern at the Learning in Informal and Formal Environments Center (LIFE center) at the University of Washington. The research at the dolcelab focuses on the relationship between learning, design, collaboration, and technology where they work towards designing, building, and studying socio-technical systems that empower people as they learn and grow. His work at the LIFE center involved learning how to use Ethnographic methods in Learning sciences research and collaborated with other LIFE researchers to advance the field of learning sciences. In addition, Sameer is involved in an international partnership as part of The Mountain Project, where he conducts research on the use of culturally-appropriate information & communication technologies (ICTs) to assist intra- and inter-village discourse and learning in the middle Himalayas of India and Nepal. He explores notions of place-based learning communities, adaptive indigenous knowledge, natural capital, and ecosystems-based design and development.

October 8th – William Bradford, Professor, Finance, Business and Economic Development
"Racial Differences in Managing Finances"

William Bradford is Professor in Finance, Business and Economic Development. His research areas include corporate finance, financial institutions, and minority and small business. Dr. Bradford received his PhD from the Ohio State University. Recent publications include co-authored articles "Venture Capital Investment in Minority Business" and "Traits and Performance of the Minority Venture-Capital Industry" with Timothy Bates and "Distinishing Economically from Legally Formal Firms: targeting business support to entrepreneurs in South Africa's Townships".

October 15th – David Ginger, Assistant Professor, Physical and Materials Chemistry, Nanotechnology
“Plastic Solar Cells”

David Ginger is Associate Professor of Chemistry. Dr. Ginger has received various honors including the American Chemical Society Unilever Award (2008), Sloan Foundation Fellowship (2007), Dreyfus Teacher Scholar Award (2007), Research Corporation Cottrell Scholar (2006), Presidential Early Career Award for Scientists and Engineers (PECASE), AFOSR Sponsored (2005), National Institutes of Health Postdoctoral Fellowship, (2001-2003) and the DuPont Fellowship, Northwestern University Institute for Nanotechnology (2001-2003). Representative publications include "Time-resolved electrostatic force microscopy of polymer solar cells" <<http://www.nature.com/nmat/journal/v5/n9/full/nmat1712.html>>, D. C. Coffey and D. S. Ginger, /Nature Materials /5*, pp. 735-740, (2006) and "Bioenabled Nanophotonics" <http://www.mrs.org/s_mrs/bin.asp?CID=14227&DID=210776&DOC=FILE.PDF> Y. Chen, K. Munechika, D. S. Ginger /MRS Bulletin/, v 33 p536-542 (2008).

October 22nd – Miguel Morales, Assistant Professor, Astrophysics, Axion and Dark Matter
“Seeing the First Stars in Radio Light”

Miguel Morales is Assistant Professor in the Department of Physics with an emphasis in experimental cosmology. He is joining us from MIT where he was research scientist at Kavli Institute. His research interests focuses on developing observational techniques and instrumentation for emerging cosmology observations including: epoch of reionization observations, dark energy and cosmography. Dr. Morales was a High School Physics Teacher prior to receiving his PhD in Physics from the University of California, Santa Cruz. In addition, he was Postdoctoral Associate at MIT and Postdoctoral Fellow for the Harvard-Smithsonian Institute for Theory and Computation.

October 29th – Stevan Harrell, Professor, Anthropology
“Through rain-soaked, snake-infested thickets with GPS and roving elves: Faculty, grads, and undergrads explore local forest sustainability in China”

Stevan Harrell is Professor of Anthropology at the UW, where he has worked in the Jackson School, the Burke Museum, and now the College of the Environment in addition to the Anthropology Department. His current passion is interdisciplinary environmental research and how to involve undergraduates in it.

November 5th – Sarah Elwood, Associate Professor, Geography
"Participatory GIS: Research, Education, and Action for Social AND Technological Change"

Sarah Elwood is an Associate Professor in the Geography Department. Her research agenda focuses on the societal impacts of geographic information technologies, such as GIS and newer online technologies such as GoogleEarth, especially for traditionally excluded people and places. In Minneapolis, Chicago, Tucson, and now, in Seattle, Sarah's work weaves together research, teaching, and community outreach, using participatory research methods that bring together her own research activities, her students, and research partners from local communities and non profit organizations. She teaches Geography 360 (Principles of GIS), Geography 461 (Urban GIS), Geography 469 (GIS Workshop), Geog 490 (The Seattle Region), and graduate seminars.

November 12th – Luis Fraga, Professor, Political Science
“Research, Responsibility, and Leadership”

Luis Ricardo Fraga is Associate Vice Provost for Faculty Advancement, Director of the Diversity Research Institute, Russell F. Stark University Professor, and Professor of Political Science at the University of Washington. He has been on the faculty at Stanford University, the University of Notre Dame, and the University of Oklahoma. He is a native of Corpus Christi, Texas, where he attended public schools. He received his A.B., cum laude, from Harvard University and his M.A. and Ph.D. from Rice University. His

primary interests are urban politics, education politics, voting rights policy, and the politics of race and ethnicity. His most recent book is the coauthored *Multiethnic Moments: The Politics of Urban Education Reform* (Temple University Press 2006). He is on the Board of the Public Education Network (PEN). He is also a member of a special research committee of the National Association of Public Charter Schools (NAPCS). He has been an active member of the Transitions to College (2005-07) and the Immigration, Education, and Citizenship (2006-07) working groups of the Social Science Research Council.

Fraga is also one of six principal investigators on the Latino National Survey (LNS), the first-ever sixteen state-stratified survey of Latinos in the U.S. It asks questions regarding political attitudes, behavior, and beliefs. He is also the principal investigator on the project "Interests and Representation: Ethnic Advocacy on California School Boards," the first-ever statewide study of Latino school board members in California.

He received a number of teaching and advising awards at Stanford including the Rhodes Prize for Excellence in Undergraduate Teaching (1993), the Dinkelspiel Award for Distinctive Contributions to Undergraduate Education (1995), the Allan V. Cox Medal for Faculty Excellence Fostering Undergraduate Research (1997), the Faculty Award from the Chicano/Latino Graduating Class (1993, 1996, 1997, 1999, 2000, 2001), the Undergraduate Faculty Advisor of the Year Award (2001), and the Associated Students of Stanford University Teaching Award (2003). He was also given the Adaljiza Sosa-Riddell Award for Exemplary Mentoring of Graduate Latina/o Students by the Committee on the Status of Latinos in the Profession of the American Political Science Association (2001) and this same award for mentoring junior faculty (2004).

November 19th – Joy Williamson-Lott, Associate Professor, Educational Leadership and Policy Studies
"Student Activism and Campus Reform: A historical look"

Dr. Williamson's primary research agenda examines the reciprocal relationship between social movements--particularly those of the middle twentieth century--and institutions of higher education. Her previous work investigated black student-motivated reforms at predominantly white institutions during the Black Power era. Her book, *Black Power on Campus: The University of Illinois, 1965-1975*, examined the interaction between students and administrators that created the successful support systems which exist on today's college campuses. She has recently published *Radicalizing the Ebony Tower: Black Colleges and the Black Freedom Struggle in Mississippi*, which examines issues of institutional autonomy, institutional response to internal and external pressures, and the relationship between historically black colleges and the Civil Rights and Black Power Movements. She has also written about the Black Panther Party's educational programs, the history of social justice in education, and the portrayal of the black freedom struggle in high school history textbooks.

Dr. Williamson teaches courses on the history of education, the history of higher education, education as a moral endeavor, the shifting definition of 'proper education' and 'liberation' for different social groups, and the educational histories of people of color. She also teaches in the Secondary Teacher Education Program.

November 26th – Janice DeCosmo, Director, URP & Associate Dean of Undergraduate Academic Affairs; **Jill McKinstry**, Head, Odegaard Undergraduate Library; **Jennifer Harris**, Associate Director, URP & **Jessica Salvador**, Graduate Staff Assistant, URP
"Ethics, Research, and Undergraduates"

As an undergraduate researcher, it is important to be aware of the standards of ethical conduct involved in research. In addition, if you plan to do research or are currently involved in research that deals with human or animal subjects, one must be fully informed about and compliant with the UW policy and federal regulatory requirements for conducting research with humans and animals. Information regarding research ethics is also available at our website at <http://www.washington.edu/research/urp/students/ethics.html>.

December 3rd – Final Quiz

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This course is made possible by the Odegaard Undergraduate Library, the Undergraduate Research Program, and the Office of Undergraduate Education.