

Term Information

Effective Term Summer 2012

General Information

Course Bulletin Listing/Subject Area Linguistics
Fiscal Unit/Academic Org Linguistics - D0566
College/Academic Group Arts and Sciences
Level/Career Graduate, Undergraduate
Course Number/Catalog 5700
Course Title Training in Science Education Outreach
Transcript Abbreviation Sci Edu Outreach
Course Description This course will provide hands-on exposure to science education at the Center of Science and Industry (COSI). Students will learn to explain a specific set of experiments centered on the study of language, and will also receive general training in how to present scientific information to a general audience.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week (May + Summer)
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Field Experience, Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Sometimes
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites Permission of instructor
Exclusions

Cross-Listings

Cross-Listings Cross listed in Psychology

Subject/CIP Code

Subject/CIP Code 16.0102
Subsidy Level Masters Course
Intended Rank Junior, Senior, Masters, Doctoral

Quarters to Semesters

Quarters to Semesters

New course

Give a rationale statement explaining the purpose of the new course

Provide hands-on training in informal science education. Short term goals are to teach students a set of specific skills which will be put to practical use at COSI; long term goals are to inspire students to consider science education as a career

Sought concurrence from the following Fiscal Units or College

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- To understand the content of specific research studies
- To communicate scientific information to the general public, both adults and children
- To learn about career opportunities in science education

Content Topic List

- Science and methods of 3-6 specific research studies
- How to talk about science to a general audience
- General principles of science education
- Education and career prospects in science education

Attachments

- Ling_5700_Syllabus-Revised.pdf: Revised Syllabus

(Syllabus. Owner: McGory,Julia Tevis)

Comments

- 2 comments on the syllabus: an F grade should be an E and there should be more information on the requirements for the oral presentations and an indication what readings will be assigned when. *(by Heysel,Garett Robert on 03/30/2012 01:44 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	McGory,Julia Tevis	03/15/2012 02:37 PM	Submitted for Approval
Approved	McGory,Julia Tevis	03/15/2012 02:38 PM	Unit Approval
Revision Requested	Heysel,Garett Robert	03/30/2012 01:44 PM	College Approval
Submitted	McGory,Julia Tevis	04/04/2012 11:54 AM	Submitted for Approval
Approved	McGory,Julia Tevis	04/04/2012 11:55 AM	Unit Approval
Approved	Heysel,Garett Robert	04/25/2012 09:17 PM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadette Chantal Hogle,Danielle Nicole Hanlin,Deborah Kay	04/25/2012 09:17 PM	ASCCAO Approval

Linguistics 5700
Training in Science Education Outreach
Fall Semester 2012

Class # 3 credit hours MWF in the 3ish range

Instructor Info: Laura Wagner
Office: 241 Psychology
Phone: 688-3260
Office hours: By appointment
Email: wagner.602@osu.edu

Course Objectives:

The purpose of this course is to provide hands-on exposure to science education. Students will learn to explain a specific set of experiments centered on the study of LANGUAGE, and will also receive general training in how to present scientific information to a general audience. Much of the class will be conducted at the Center of Science and Industry (COSI) museum and students will spend significant amounts of time acting as informal science educators with visitors to the museum.

Pre-Requisites:

All students must have permission of the instructor to enroll.

Course Materials:

REQUIRED:

- Pinker, S. (1994) *The Language Instinct*. NY: Harper Collins. (You are welcome to read ANY edition available of this book)
- Assorted articles (available on the Carmen site)

OPTIONAL:

- Linguistics Department (2011) *The Language Files*. Columbus, OH: Ohio State University Press. (This is the 11th edition, but you may find older editions to be reasonably helpful.)
- Fleming, C. (2010) *It's the Way You Say It: Becoming Articulate, Well-Spoken, and Clear*. Bloomington, IN: iUniverse.

Course Assignments:

Students will be graded on three components of work:

- Written Component (20%)

Undergraduate students will keep a journal of their experiences during the course and will periodically be asked to turn in portions of that journal.

Graduate students will write a proposal for an educational demonstration to be conducted at COSI.

- Oral Presentations (40%) Half of this component will consist of two oral presentations in front of class members prior to working in the museum. The remaining half will consist of an observation of a student's presentation to visitors in the museum.

- Attendance (40%) A critical component of this course is the hands-on time at the COSI museum. Several formal class sessions will be cancelled to accommodate some of the hands-on time.

Students are expected to spend a minimum of 2 hours at COSI for each cancelled class session. These hours will be scheduled and tracked, and some of them will happen during weekend and evening times. Note that in addition, some regular course sessions will be held at the COSI museum.

Grading:

The following grade pattern will be used:

		A	93 – 100	A-	90 - 92
B+	87 – 89	B	83 – 86	B-	80 – 82
C+	77 – 79	C	73 – 76	C-	70 – 72
		D	60 - 69		
		E	below 60		

Disability Services: Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Academic Misconduct: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc.asp).

Schedule

Week #	Meetings	Assignments	Topics
1	• Meet as a class (3 sessions)		• Science Education: what it is and why you should want to do it • Learn about specific language experiments
2	• Meet as a class (2 sessions) • Begin hands-on COSI hours		• COSI: Orientation to the museum • Science Education: how to talk about science to regular people
3	• Meet as a class (1 session) • Hands-on COSI hours	• Oral presentations (in class)	• Further learning about specific language experiments

4	<ul style="list-style-type: none"> • Meet as a class (1 session) • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (in class) • Turn in portion of journal 	<ul style="list-style-type: none"> • Class discussion: questions and issues related to language sciences
5	<ul style="list-style-type: none"> • Meet as a class (1 session) • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (in class) 	<ul style="list-style-type: none"> • Class discussion: questions and issues related to language sciences
6	<ul style="list-style-type: none"> • Hands-on COSI hours 		
7	<ul style="list-style-type: none"> • Meet as a class (1 session) • Hands-on COSI hours 	<ul style="list-style-type: none"> • Turn in portion of journal 	<ul style="list-style-type: none"> • Science education: Perspectives on Scientific Inquiry
8	<ul style="list-style-type: none"> • Hands-on COSI hours 		
9	<ul style="list-style-type: none"> • Meet as a class (1 session) • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (observations) 	<ul style="list-style-type: none"> • COSI: COSI University training for working with museum visitors
10	<ul style="list-style-type: none"> • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (observations) • Turn in portion of journal 	
11	<ul style="list-style-type: none"> • Meet as a class (1 session) • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (observations) 	<ul style="list-style-type: none"> • Science education: review of best practices in the field
12	<ul style="list-style-type: none"> • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (observations) 	
13	<ul style="list-style-type: none"> • Hands-on COSI hours 	<ul style="list-style-type: none"> • Oral presentations (observations) 	
14	<ul style="list-style-type: none"> • Meet as a class (1 session) • Finish hands-on COSI hours 	<ul style="list-style-type: none"> • Turn in portion of journal 	<ul style="list-style-type: none"> • Class discussion: Perspectives on science education in a museum setting

Article Readings

• GENERAL READINGS (To be used in all classes)

Dierking, L., D., Falk, J. H., Rennie, L., Anderson, D. & Ellenbogen, K. (2003). Policy Statement of the “Informal Science Education” Ad Hoc Committee. *Journal of Research in Science Teaching* 40 (2), 108 – 111.

Falk, J. H. & Needham, M. D. (2011). Measuring the Impact of a Science Center on Its Community. *Journal of Research in Science Teaching* 48 (1), 1 – 12.

Falk, H. H. & Storksdieck, M. (2010) Science Learning in a Leisure Setting. *Journal of Research in Science Teaching* 47 (2), 194 – 212.

Popper, K. R. (1963) “Science as Falsification.” Selection from *Conjectures and Refutations*. NY: Routledge.

Harmon, J. E. & Gross, A. G. (2010) *The Craft of Scientific Communication*. Chicago: University of Chicago Press. (Selected sections posted).

- EXPERIMENT SPECIFIC READINGS (different each time the class is taught)

You are responsible for being able to explain the experimental research going on at COSI. There will be in-class presentations about those studies, and in addition, you are expected to read a study-specific paper.

Some sample papers are these:

Campbell-Kibler, K. (in press) Contestation and Enregisterment in Ohio's Imagined Dialects. *Journal of English Linguistics*.

Clopper, C. G., & Bradlow, A. R. (2009). Free classification of American English dialects by native and non-native listeners. *Journal of Phonetics*, 37, 436-451.

Wagner, L., Greene-Havas, M. & Gillespie, R. (2010) Development in Children's Comprehension of Linguistic Register. *Child Development* 81 (6), 1678 – 1685.