

## Term Information

Effective Term Summer 2012

## General Information

Course Bulletin Listing/Subject Area Psychology  
Fiscal Unit/Academic Org Psychology - D0766  
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 Linguistics 5700

## Subject/CIP Code

Subject/CIP Code 42.0101  
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; the 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**

- Psych 5700 Syllabus-Revised.doc: Course Syllabus

*(Syllabus. Owner: Paulsen,Alisa Marie)*

**Comments**

- Syllabus has been revised and resubmitted per request as well as sent to Linguistics for resubmission. *(by Paulsen,Alisa Marie on 04/02/2012 12:52 PM)*
- See 4-2-12 e-mail to A. Paulsen. *(by Vankeerbergen,Bernadette Chantal on 04/02/2012 10:07 AM)*

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Paulsen,Alisa Marie	03/14/2012 12:23 PM	Submitted for Approval
Approved	Nygren,Thomas Eugene	03/14/2012 02:49 PM	Unit Approval
Approved	Haddad,Deborah Moore	03/14/2012 04:34 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	04/02/2012 10:08 AM	ASCCAO Approval
Submitted	Paulsen,Alisa Marie	04/02/2012 12:52 PM	Submitted for Approval
Approved	Petty,Richard Edward	04/02/2012 01:09 PM	Unit Approval
Approved	Haddad,Deborah Moore	04/02/2012 01:38 PM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadette Chantal Hogle,Danielle Nicole Hanlin,Deborah Kay	04/02/2012 01:38 PM	ASCCAO Approval



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+	B	83 – 86	B-	80 – 82
C+	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](http://studentaffairs.osu.edu/info_for_students/csc.asp)).

**Schedule**

Week #	Meetings	Assignments	Topics
1	<ul style="list-style-type: none"> <li>• Meet as a class (3 sessions)</li> </ul>		<ul style="list-style-type: none"> <li>• Science Education: what it is and why you should want to do it</li> <li>• Learn about specific language experiments</li> </ul>
2	<ul style="list-style-type: none"> <li>• Meet as a class (2 sessions)</li> <li>• Begin hands-on COSI hours</li> </ul>		<ul style="list-style-type: none"> <li>• COSI: Orientation to the museum</li> <li>• Science Education: how to talk about science to regular people</li> </ul>
3	<ul style="list-style-type: none"> <li>• Meet as a class (1 session)</li> <li>• Hands-on COSI hours</li> </ul>	<ul style="list-style-type: none"> <li>• Oral presentations (in class)</li> </ul>	<ul style="list-style-type: none"> <li>• Further learning about specific language experiments</li> </ul>

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

#### 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.