

Types of Outreach Opportunities at Penn State

(PD = Professional Development; MS = Middle School; HS = High School) (Groups in italics = External to Penn State)

Outreach Group	Outreach Domains/Target Audience				
	Community/ General Public	K-12 Students	K-12 Educators	Higher Education	Industry/Workforce
Center for Nanoscale Science http://www.mrsec.psu.edu	<ul style="list-style-type: none"> Museum Shows at the Franklin Institute http://www.mrsec.psu.edu/museum/index.asp Curriculum for science activities at home (IPSE) http://www.ipse.psu.edu/activities/ 	<ul style="list-style-type: none"> Summer camps for MS & HS students http://www.mrsec.psu.edu/education/summercamps/index.asp 	<ul style="list-style-type: none"> Summer Teacher Workshop Summer research experiences In-class science demonstrations http://www.mrsec.psu.edu/education/teachers/index.asp 	<ul style="list-style-type: none"> Research experiences for undergraduate students (REU, SROP, WISER) http://www.mrsec.psu.edu/education/undergrads/index.asp 	
Center for Nanotechnology Education & Utilization (CNEU) http://www.cneu.psu.edu Nanotechnology Applications & Career Knowledge (NACK) http://www.nano4me.org		<ul style="list-style-type: none"> Summer camps One-day & 3-day camps (offered year round) http://www.cneu.psu.edu/edOutreachSecEd.html 	<ul style="list-style-type: none"> Workshop in nanofabrication Career Information about Nanotechnology Summer research experiences http://www.cneu.psu.edu/edStudentSite.html Video modules Animations about nanotechnology http://www.cneu.psu.edu/edToolsActivities.html 	<ul style="list-style-type: none"> Workshops in nanotechnology Degree & certificate program in nanofabrication Video Modules http://www.cneu.psu.edu/edStudentSite.html 	<ul style="list-style-type: none"> Workshops in nanotechnology Degree & certificate program in nanofabrication Video Modules http://www.cneu.psu.edu/industry.html
Center for Science and the Schools (CSATS) http://csats.psu.edu		<ul style="list-style-type: none"> Classroom-based authentic research projects (FLEXE; reBuild; CarbonEARTH; Graduate student mentors in K-12 classrooms (CarbonEARTH; GREATT) http://csats.psu.edu/projects/currentprojects.cfm 	<ul style="list-style-type: none"> PD for science teaching (Saturday Science; SNACKS; CarbonEARTH) PD on engaging K-12 students in classroom-based science research (CarbonEARTH; reBuild; SNACKS; Wind for Schools) Research Experiences for Teachers (Boeing Sabbaticals and RETs; MRSEC) On-line K-12 science and engineering curriculum (E21; GREATT) http://csats.psu.edu/projects/currentprojects.cfm 	<ul style="list-style-type: none"> Resources for developing Outreach Programs (STEM Outreach Database; Curriculum Center; Online Digital Research Library) http://csats.psu.edu/projects/currentprojects/stem.cfm http://csats.psu.edu/resources.cfm Services for developing Outreach Programs http://csats.psu.edu/services.cfm Revision of university lab curricula & Training for lab TAs (Gateways) 	

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				http://csats.psu.edu/projects/currentprojects.cfm <ul style="list-style-type: none"> Preparation for undergrad and grad students to work in K-12 classrooms (CarbonEARTH; reBUild) http://csats.psu.edu/projects/currentprojects.cfm	
Center for Sustainability http://www.cfs.psu.edu	<ul style="list-style-type: none"> Workshops on organic food production (Community Gardens at Penn State) https://sites.google.com/a/psu.edu/community-garden/ <ul style="list-style-type: none"> Field Trips to Morningstar Solar Home http://www.cfs.psu.edu/programs/morningstar-solar-home.html	<ul style="list-style-type: none"> Field Trips to Morningstar Solar Home http://www.cfs.psu.edu/programs/morningstar-solar-home.html	<ul style="list-style-type: none"> Field Trips to Morningstar Solar Home Workshops on Sustainable Energy http://www.cfs.psu.edu/programs/morningstar-solar-home.html	<ul style="list-style-type: none"> Connections to careers in sustainability (Green Careers) National Energy Leadership Corps Competition (Green Energy Challenge) Minor in Sustainability leadership American Indian Housing Initiative (AIHI) Service programs (Renew Crew; Renewable Energy Central America) http://www.cfs.psu.edu/programs.html	<ul style="list-style-type: none"> Connections to careers in sustainability (Green Careers; GridSTAR Center) http://www.cfs.psu.edu/programs/grid-star-center.html
Cooperative Extension http://extension.psu.edu	Information: <ul style="list-style-type: none"> Animal Sciences Agricultural Crops Soil Management Forest Management Diseases, Pests, and Weeds Bees Integrated Pest Management Water & Wetlands Gardening Museums: <ul style="list-style-type: none"> Frost Entomology Museum Shaver's Creek Raptor Center & Discovery Room http://extension.psu.edu/	<ul style="list-style-type: none"> One day events (Entomology) 4-H Youth Clubs Summer Day Camps (Shaver's Creek) Field Trips (Shaver's Creek) Outdoor School (Shaver's Creek) http://ento.psu.edu/kids/great-insect-fair http://extension.psu.edu/home-family/4-h http://www.outreach.psu.edu/shaverscreek/	<ul style="list-style-type: none"> Curriculum on forest, wildlife and water resources (4-H) http://rnrext.cas.psu.edu/Youth/	<ul style="list-style-type: none"> Collegiate 4-H http://agsci.psu.edu/clubs/c4h	<ul style="list-style-type: none"> PennTAP energy efficiency services – analysis and information about energy consumption for businesses http://www.penntap.psu.edu/energy/ <ul style="list-style-type: none"> Information and resources for Agriculture-related businesses http://extension.psu.edu/community-economics/business

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Earth and Mineral Sciences	<ul style="list-style-type: none"> EMS Museum and Art Gallery Access to PA Climatology data http://www.ems.psu.edu/outreach/museum	<ul style="list-style-type: none"> Summer camps (Penn State Weather Camp) Curriculum on Climate Change Shake, Rattle, and Rocks http://www.outreach.psu.edu/programs/weather-camp/	<ul style="list-style-type: none"> Field Trips to EMS Museum and Art Gallery http://www.ems.psu.edu/outreach/museum		<ul style="list-style-type: none"> Continuing education for blasting professionals http://www.ems.psu.edu/outreach/camps_conferences
Eberly College of Science	<ul style="list-style-type: none"> One day community events (AstroFest, Astronomy Open House) Elderhostel lecture series Educational Travel and Learning Vacations 				
Eberly College Outreach Office http://www.science.psu.edu/outreach	<ul style="list-style-type: none"> One day community events (Exploration Day) http://www.science.psu.edu/outreach/outreach-program-descriptions/for-families	<ul style="list-style-type: none"> Summer Camps for grades 2-12 students (Science-U) Lab Tours Science and Math experiences for Urban Students (SEECoS) Planetarium shows Science competitions STEM Career videos http://www.science.psu.edu/outreach/outreach-program-descriptions/youth-programs	<ul style="list-style-type: none"> Science content workshops for teachers (see PSGC; Forensic Science Workshops) Conversations with scientists (Penn State STEM Teacher Academy) Forensic Science Workshop Series http://www.science.psu.edu/outreach/outreach-program-descriptions/for-k-12-teachers	<ul style="list-style-type: none"> On-line Science Course Development Student Outreach Clubs http://www.science.psu.edu/outreach/for-penn-state-students	
National Nanotechnology Infrastructure Network (NNIN) http://www.mri.psu.edu/facilities/nnin			<ul style="list-style-type: none"> Research Experience for Teachers (RET) http://www.mri.psu.edu/facilities/NNIN/REUProgram/RETProgram.asp	<ul style="list-style-type: none"> Research Experience for Undergraduates (REU) http://www.mri.psu.edu/facilities/NNIN/REUProgram/REUProgram.asp	
Pennsylvania Space Grant Consortium (PSGC) http://pa.spacegrant.org	<ul style="list-style-type: none"> Resources http://pa.spacegrant.org/resources	<ul style="list-style-type: none"> Opportunities for Grades K-8 students (events) Opportunities for Grade 9-12 students (competitions; events) http://pa.spacegrant.org/k-8-student-opportunities http://pa.spacegrant.org/9-12-student-opportunities	<ul style="list-style-type: none"> Summer workshops for teachers Guest speakers for classrooms http://pa.spacegrant.org/education-opportunities	<ul style="list-style-type: none"> Undergraduate scholarships (FURP; MURE; WISER; PSGC Undergrad Scholarship) Graduate fellowships Internships Travel Grants http://pa.spacegrant.org/scholarship-opportunities-for-undergraduate-students http://pa.spacegrant.org/fellowships-for-grad-students http://pa.spacegrant.org/internship-opportunities	

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Penn State Astrobiology Research Center	<ul style="list-style-type: none"> Science Cafes http://php.scripts.psu.edu/dept/psarc/index.php?page=education-public-outreach Resources about Astrobiology http://www.psu.edu/spacegrant/astrobiology/ 	<ul style="list-style-type: none"> Resources about Astrobiology http://astrobiology.nasa.gov/nai/education-and-outreach/products-and-resources/ 	<ul style="list-style-type: none"> Resources about Astrobiology http://astrobiology.nasa.gov/nai/education-and-outreach/products-and-resources/ Workshops for Educators http://php.scripts.psu.edu/dept/psarc/index.php?page=education-public-outreach 	<ul style="list-style-type: none"> Dual Title Graduate Degree in Astrobiology http://php.scripts.psu.edu/dept/psarc/index.php?page=graduate-degree Astrobiology Minor for Undergraduates http://php.scripts.psu.edu/dept/psarc/index.php?page=astrobiology-minor Astrobiology Research Experiences for Undergraduates http://php.scripts.psu.edu/dept/psarc/index.php?page=undergraduate-opportunities 	
Penn State Public Broadcasting/WPSU http://www.wpsu.org	<ul style="list-style-type: none"> Documentary videos (Liquid Assets, Telling Amy's Story) Online video series (Geospatial Revolution (Vote 08)) Websites and interactives (Vote 08) TV & radio research dissemination http://www.creativegroup.psu.edu 	<ul style="list-style-type: none"> Interactive educational games Video clips Educational outreach events Websites www.wpsu.org/kidsandfamily 	<ul style="list-style-type: none"> Classroom resources Digital learning objects Curriculum design Professional development http://www.wpsu.org/educaion 	<ul style="list-style-type: none"> Research dissemination Videos for academic conferences Course enhancements (Milgrim, Jung) Online video series Recruitment http://www.mediasales.psu.edu/ http://www.creativegroup.psu.edu 	<ul style="list-style-type: none"> Research dissemination Workforce development campaigns Professional development Web development and interactivity http://www.creativegroup.psu.edu
Radiation Science and Engineering Center http://www.rsec.psu.edu/	<ul style="list-style-type: none"> Group tours Parents & Families Weekend Open House 	<ul style="list-style-type: none"> Field Trips Tours hands-on educational experiences On-line worksheets Distance labs 	<ul style="list-style-type: none"> Workshops 	<ul style="list-style-type: none"> Field Trips ours hands-on educational experiences Workshops Special programs 	<ul style="list-style-type: none"> Courses through World Campus Special programs by arrangement
World Campus http://www.worldcampus.psu.edu	<ul style="list-style-type: none"> Online courses http://www.worldcampus.psu.edu 	<ul style="list-style-type: none"> STEM course work prior to admission to PSU http://www.worldcampus.psu.edu 	<ul style="list-style-type: none"> M.Ed. in Earth Sciences http://www.worldcampus.psu.edu/MasterinEarthScience.shtml 	<ul style="list-style-type: none"> Course work toward Penn State degrees & certificates http://www.worldcampus.psu.edu/degrees.shtml http://www.worldcampus.psu.edu/certificates.shtml 	<ul style="list-style-type: none"> Courses needed by military and veteran students http://www.worldcampus.psu.edu/military-online/index.shtml Courses for returning Penn State Students Collaborations to develop programs for specific corporation needs http://www.worldcampus.psu.edu/StudentServices_Corporations.shtml

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Small Business Development Center http://sbdc.psu.edu	<ul style="list-style-type: none"> Business consulting Engineering development service International trade Technology Commercialization Assistance http://sbdc.psu.edu/services.htm				<ul style="list-style-type: none"> Business consulting Engineering development service International trade Technology Commercialization Assistance http://sbdc.psu.edu/services.htm
Whitaker Center for Science and the Arts http://www.whitakercenter.org/	<ul style="list-style-type: none"> Exhibits http://www.whitakercenter.org/Science-Center-Exhibits.html Special Programs (Winter & Summer Science Camps; Artist Seminars) http://www.whitakercenter.org/Science-Center-Special-Programs.html 	<ul style="list-style-type: none"> Exhibits http://www.whitakercenter.org/Science-Center-Exhibits.html Special Programs (Winter & Summer Science Camps; Artist Seminars) http://www.whitakercenter.org/Science-Center-Special-Programs.html 	<ul style="list-style-type: none"> Programs & Exhibits related to PA Academic Standards http://www.whitakercenter.org/Science-Center-For-Educators.html 		
Franklin Institute Science Museum http://www2.fi.edu/	<ul style="list-style-type: none"> Interactive exhibits http://www2.fi.edu/ Institute/Library Collaborations (LEAP into Science) http://www.fi.edu/leap/ Program promoting careers in technology and Science (PACTS) http://www2.fi.edu/programs/pacts/ 	<ul style="list-style-type: none"> Summer camps (Discovery Camp) http://www2.fi.edu/programs/discovery-camp/index.php Day Camps on holidays (School's Out Camp) http://www2.fi.edu/programs/discovery-camp/schoolout.php Day Camps during Spring Break (Spring Break Camp) http://www2.fi.edu/programs/discovery-camp/springbreak.php Sleepover Camp http://www2.fi.edu/programs/camp-in/index.php After School Science program http://www.fi.edu/Afterschool/ 	<ul style="list-style-type: none"> Field Trips http://www.fi.edu/ftp/index2.html Traveling Science Shows to classrooms http://www2.fi.edu/programs/trs/index.html 	<ul style="list-style-type: none"> Penn State students designing and implementing Museum Shows at the Franklin Institute http://www.mrsec.psu.edu/museum/index.asp 	
Discovery Space of Central Pennsylvania (coming) http://www.mydiscoveryspace.org/mydiscoveryspace/site/default.asp	<ul style="list-style-type: none"> Interactive Programs for children ages 1-12 http://www.mydiscoveryspace.org/208510112092539847/site/default.asp 				
Earth & Mineral Sciences Museum http://www.ems.psu.edu/outreach/museum	<ul style="list-style-type: none"> Exhibits for public http://www.ems.psu.edu/outreach/museum 	<ul style="list-style-type: none"> Field Trips http://www.ems.psu.edu/outreach/museum 	<ul style="list-style-type: none"> Field Trips Geowall presentations http://www.ems.psu.edu/outreach/museum 		

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Frost Entomology Museum http://ento.psu.edu/facilities/frost	<ul style="list-style-type: none"> Museum Tours http://ento.psu.edu/facilities/frost 	<ul style="list-style-type: none"> Field Trips http://ento.psu.edu/facilities/frost 	<ul style="list-style-type: none"> Field Trips http://ento.psu.edu/facilities/frost 		
Matson Museum of Anthropology http://anth.la.psu.edu/matsonmuseum	<ul style="list-style-type: none"> Self-Guided Tours http://anth.la.psu.edu/matsonmuseum/visitor-information 			<ul style="list-style-type: none"> Collection management and research Exhibit design Work study http://anth.la.psu.edu/matsonmuseum/visitor-information 	