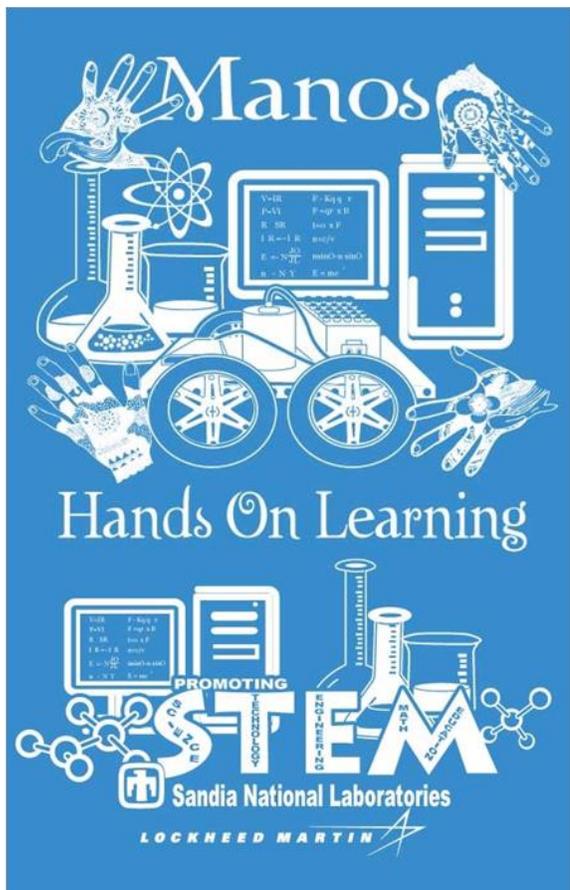


MANOS 2016-2017



National
Hispanic
Cultural
Center

Location:

National Hispanic Cultural Center
Pete V. Domenici Education Building
(Creative Classroom)
1701 4th Street SW

Dates: Thursdays, 8/25/16 – 5/18/17
Times: 4 PM to 6 PM

Check out our Website!

<https://share.sandia.gov/stem/manos/index.html>

What is Manos?

Manos Hands-on Science and Engineering Program is an educational supplement targeting Hispanic middle school students. The Program is sponsored by Sandia National Laboratories' Hispanic Leadership Outreach Committee, Diversity, Community Involvement, EEO & AA, Albuquerque Public Schools and the National Hispanic Cultural Center (NHCC).

This program is designed to introduce Science, Technology, Engineering, and Math (STEM) concepts to middle school students and spark their interest in pursuing careers in those fields. This program is offered each school year for students in grades 6th - 8th. Students and parents are encouraged to participate and volunteer.

What is the purpose of the Manos Program?

- Develop awareness and pride in accomplishments of Hispanic professionals and inventors.
- Increase the pool of Hispanic students who pursue degrees in STEM.
- Support the development of a scientific and technically trained student-base with hands-on technology experiences.

Workshops:

Manos provides students the opportunity for early high-tech business involvement with local communities. Young minds are inspired through engineering and scientific experiences. The focus is to increase and promote student academic excellence at the pre-college level. Manos nurtures "hands-on" science, technology, engineering and math experiences primarily for Hispanic students, but the program is open to all students. Manos works to improve students' academic rate of success and personal self-esteem. The Manos Program continues to foster and expand awareness of self-respect for the contributions and achievements of Hispanic inventors and scientists.

Seven Sessions will be offered throughout the school year. See reverse side of this sheet for details.

Who can participate?

All students in grades 6th through 8th are eligible to participate. Enrollment is on a first come first served basis. There is no cost to the student for attending the program. **Bussing is provided from the target school only** (see reverse for schedule). All other transportation, including pick-up at class dismissal is not provided.

MANOS 2016-2017

Register Online: <https://nhccnm.wufoo.com/forms/manos/>

*Students are transported via bus from the target school, for dates indicated, free of charge, and MUST be picked up at the NHCC by class dismissal promptly at 6:00 p.m.

Session Dates	Manos Session	Session Description	Target School <small>*Bus service provided</small>	Manos Sign-up Event Noche de Ciencias (Science Night) <small>Dates Subject to Change</small>	Registration Period:
Session 1 Thursdays, 4-6pm 8/25/16 - 9/29/16 (6 weeks)	Intro to Engineering	Are you creative, curious, like to build things or just take things apart and see how they work? Then engineering is for you!!! Like to build cards, try mechanical engineering. Like to build bridges, civil engineering is the place. In each class, you will become a different type of engineer, learn about them, how to become a "real" one and work on a fun activity.	Ernie Pyle	Wed., 8/17/16, 5-7pm	8/11 - 8/24
Fall Break 10/6/16					
Session 2 Thursdays, 4-6pm 10/13/16 - 11/17/16 (6 weeks)	ChemisTRY	Chemistry makes up every part of our lives. Students will learn how chemistry plays a big role in the world, from tiny particles in sunblock to planets in the universe. Hands on projects will expose students to the amazing science we call chemistry!	John Adams	Tues., 9/27/16, 5-7pm	9/20 - 10/12
			Jimmy Carter	Thurs., 9/29/16, 5-7pm	
Thanksgiving Break 11/24/16 - 11/25/16					
Session 3 Thursdays, 4-6pm 12/1/16 - 12/15/16 (3 weeks)	Fun with Math and Money	Can you guess how many Red M&Ms are in a jar? Do you know what PI is? Do you know how to make your money "grow"? This class uses fun games to help you answer these questions and more.	Harrison	Tues., 11/15/16 5-7pm	11/8 - 11/30
Winter Break 12/19/16 - 1/2/17					
Session 3 Cont. Thursdays, 4-6pm 1/12/17 - 1/26/17 (3 weeks)	Fun with Math and Money	Can you guess how many Red M&Ms are in a jar? Do you know what PI is? Do you know how to make your money "grow"? This class uses fun games to help you answer these questions and more.	Harrison	Tues., 11/15/16 5-7pm	11/8 - 1/11
Parent/Teacher Conferences 2/23/17 - Manos will be in session, bus service provided					
Session 4 Thursdays, 4-6pm 2/2/17 - 3/16/17 (7 weeks)	Computer Discovery	What makes a computer tick and how can you use it? Take a computer apart. Connect to the internet. Use email to communicate with friends. Build your own personal web page for others to see. Program and control a robot to make it do what you want it to.	South Valley Prep	Tues., 1/17/17 5-7pm	1/10 - 2/1
	Electronics	What is a component? What is integrated circuitry and how does it work? What makes a computer work? Who is <i>Ohm</i> and what is it? How is the flow of electricity controlled?	Truman	Thurs., 1/19/17 5-7pm	
Spring Break 3/20/17 - 3/24/17					
Session 5 Thursdays, 4-6pm 4/6/17 - 5/18/17 (7 weeks)	Robotics	Students learn how to build and program robots and work with <i>LEGO MINDSTORM KITS</i> . Students will learn how to make a robot follow a line, how to use touch and light sensors. The students will learn about career pathways in high wage, high technology fields. They will also learn about the importance of teamwork in a competitive environment.	Polk	Tues., 3/21/17 5-7pm	3/14 - 4/5
	Physics	How does a rocket fly? Why does the light turn on when I flip a switch? How does a rollercoaster work? Can I drop an egg and not break it? Learn the answers to these questions and more by conducting experiments in force, mass, energy, friction, momentum, aerodynamics, heat and magnetism.	Washington	Thurs., 3/23/17 5-7pm	

Register Online: <https://nhccnm.wufoo.com/forms/manos/>

Locations: All Manos Sessions are held at the National Hispanic Cultural Center (NHCC), Pete V. Domenici Education Building
All Noche de Ciencias Events are held at the host school
STEAM Fair - Dream Builder Event is held at the NHCC

For more information contact: Rebecca Lopez, 505-845-9848, rllopez@sandia.gov