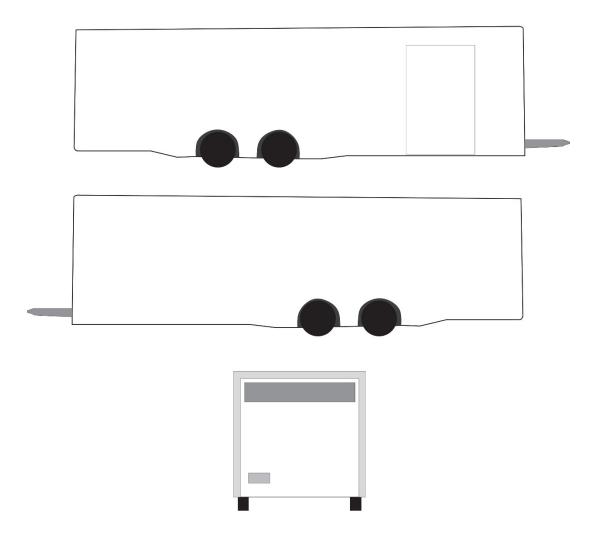






Permian Basin Students – We Need Your Help!



Inside the trailer shown above is a **Mobile Fab Lab** – an exciting learning space and laboratory on wheels that contains advanced digital design and fabricating equipment. This Fab Lab will help you and your fellow students turn your imagination into designs, and then turn those designs into real, solid, working versions of almost anything you can imagine!

This **Mobile Fab Lab** will be headed your way soon, but first, we need exciting and colorful **Science**, **Technology**, **Engineering**, **Art** and **Mathematics** (**STEAM**) images to go on the vinyl wrap that will cover the entire outside of the trailer – and that's where YOU come in!

THE MOBILE FAB LAB PERMIAN BASIN AT ODESSA COLLEGE WRAP DESIGN CONTEST

Help us by designing colorful images to go on the outside of this trailer, and you could win cool equipment for yourself, hours (or even days!) of time to use the Mobile Fab Lab for yourself and for your school, and even an all-expenses-paid trip to the **Grand Opening** of the exciting new main **Fab Lab Permian Basin at Odessa College** in Odessa, Texas on **February 1, 2017**!

All public and private school students in the Permian Basin are eligible to enter the contest, and are invited to create a colorful **STEAM** image based on the theme: "What would YOU make in YOUR Fab Lab?", and to submit that image as an entry in the Mobile Fab Lab Permian Basin Wrap Design Contest.

Entries will be accepted in four (4) Grade Level Categories:

- Elementary School (Grades K-5)
- Middle School (Grades 6-8)
- High School (Grades 9-12)
- Collegiate (Undergraduates only Freshman, Sophomores, Juniors & Seniors as of 09/01/2016)

Oh, and one more thing – if you're chosen as one of the **Mobile Fab Lab Permian Basin at Odessa College Wrap Design Contest** winners, your own, personal design will be displayed on the exterior panels of the Mobile Fab Lab for everyone to see as it travels to schools, businesses and towns all across the Permian Basin region of West Texas!

Entries to the Mobile Fab Lab Permian Basin at Odessa College Wrap Design Contest may be submitted in either of two formats:

- As illustrations/drawings on a sheet of paper **no larger than 11" x 17"** in overall size (*please mail paper entries rolled up, in a mailing tube, and NOT folded.*)
- As a digital (computer) file, preferably in .pdf (preferred) or .eps format

Paper Entries should be mailed (rolled up and NOT folded, placed in a mailing tube) to:

Mobile Fab Lab Design Contest Attn: Cedric Bleimling, Director Fab Lab Permian Basin at Odessa College 201 W. University Blvd. Odessa, TX 79764

Digital Entries (.pdf or .eps files) should be emailed to:

<u>cbleilming@odessa.edu</u> & <u>frich@odessa.edu</u> with "Mobile Fab Lab Wrap Design Contest entry" in the subject line.

NOTE: Digital entries larger than 20 Megabytes in file size should be loaded on a USB (thumb) drive and mailed in an envelope to the same address as the paper entries (above).







THE CONTEST GUIDELINES:

- Students currently enrolled in all Grade Category Levels are invited to design graphics to be included in the exterior vinyl "wrap" that will be applied to all the exterior surfaces of the **Mobile Fab Lab Permian Basin at Odessa College** trailer that will travel throughout the Permian Basin region.
- Students should design a colorful, **STEAM**-related image depicting the theme: **"What would YOU make** in **YOUR Fab Lab"**; no artistic ability is required, just enthusiasm and an active imagination!
- Winning images will be permanently displayed on the exterior panels of the **Mobile Fab Lab Permian Basin at Odessa College**
- Multiple Winning entries from every grade level will be chosen and merged into one design for the final vinyl wrap design for the exterior of the **Mobile Fab Lab Permian Basin at Odessa College**.

CONTEST DEADLINE:

•The deadline for submission of entries to the Mobile Fab Lab Wrap Design Contest is **Monday, December 19, 2016, at 5:00 pm CST.**

One Grade Category Winner and Two Honorable Mention Winners will be selected in each grade level category by the Mobile Fab Lab Wrap Design Contest Judges Panel. Each Grade Category Winner will receive a full eight-hour day of Mobile Fab Lab Permian Basin at Odesa College use at their school's location and a Maker's Kit with a 3-D Pen and Makey-Makey materials included. Honorable Mention Winners will receive a Maker's Kit with a 3-D Pen and Makey-Makey materials included

One over all Grand Prize Winner will be chosen from the four Grade Category Winners, and that Grand Prize Winner will receive an all-expenses-paid trip to Odessa, including transportation, meals and overnight lodging for the winner and his/her parents or guardian (and the Grand Prize Winner's teacher/instructor of the course in which the entry was developed, if applicable.) to attend the Grand Opening Ceremony of the Fab Lab Permian Basin at Odessa College.

Contest Start Date: Friday, November 18, 2016

Deadline for Entries: Monday, December 19, 2016, 5:00 pm

All entries, whether submitted by mail or by email, must be received no later than 5:00 pm CST on Monday, December 19, 2016. Late entries will not be included in the judging for the four (4) Grade Category Winners or the eight (8) Grade Category Honorable Mention awards. Decision of the judges is final. Grade Category Winners and Grade Category Honorable Mention award recipients will be notified by email and hard copy "snail mail" via the United States Postal Service. The Grand Prize Winner will be notified by email, phone call and hard copy "snail mail" via the United States Postal Service.







Background Information for Principals, Counselors and Teachers:

What is a Fab Lab? In the simplest of terms, a Fab Lab is a place where technology empowers users with the ability to create almost *anything* they can imagine!

But what does that actually mean? How does that translate into day-to-day life? Well, for instance, a Fab Lab is the perfect place for:

- Anyone, of any age, who has ever wanted to create a totally new and different object or device.
- Individuals who have thought of a better way to repair or update a broken or obsolete machine, tool, device or toy.
- Those innovative thinkers young or old who have developed a plan to modify an existing object or device to make it look or perform far better than it ever has.

In the past, it often required years of study to obtain the know-how required to do any of these things. Now, thanks to digital fabrication methods, years of study can be transformed into a relatively few hours of time on a computer, designing an object or device that machines will then fabricate!

Some people might be intimidated by the idea of digital design and fabrication – mistakenly thinking that working on a computer automatically makes things much more complicated – but it's easy to explain why that's actually not the case at all.

Let's use a common computer program – for instance, simple word processor software used by millions of people every day – as an example. To produce professional, attractive and effective documents or letters, the computer doesn't require a user to write perfectly. The word processing program will allow a user to choose a type font, then it will automatically correct errors in spelling, grammar, punctuation, formatting, and, most importantly, print the same letter hundreds or even thousands of times with a simple keystroke.

When it comes to digital fabrication, the same concepts apply to physical objects or devices. Basic design input is translated by the computer programming into the digital fabrication processes required to produce three-dimensional parts or objects. This changes everything, because modern computer design and digital fabrication programming doesn't require months or even years of training to achieve the same goal!

The Fab Lab is also a community place, where peer-to-peer learning and project-based learning are encouraged. Because of the readily accessible technology that is the core of every Fab Lab, users can train

themselves to make almost anything - and still find experienced, knowledgeable help in the lab for those times when they might need a little extra advice or support.

Fab Labs also exist all other the globe, in many different countries. As the digital world knows no borders, local users may find that they will benefit from the work of a teenage girl in Germany, or the efforts of a trained engineer in India, or the contributions of many others, from a variety of lands and cultures, who have all shared their Fab Lab experiences and work on the internet.

This transparent and cooperative culture results in amazing examples of achievement – stories of people who were empowered to create designs and complete projects that would never have been possible without the empowering technology and easy access of Fab Labs.

But really, the best way to explain a Fab Lab – to truly understand the Fab Lab experience - is to live it, so please encourage your students to come and build almost *anything* they can imagine! All that's required is an inquiring mind and a desire to make something special!

The Fab Lab Permian Basin at Odessa College is a partnership between the Fab Foundation, Chevron Corporation, and Odessa College. There will actually be two Fab Lab Permian Basin at Odessa College facilities: a larger, stationary, main Fab Lab on the campus of Odessa College, and a smaller, mobile Fab lab that will travel throughout the Permian Basin, visiting schools, businesses, organizations and communities all across the region. All students in the Permian Basin region are invited to participate in the Mobile Fab Lab Permian Basin at Odessa College Wrap Design Contest, in the hope that their imaginations will be stimulated and their curiosities piqued to learn more about the amazing world of digital design and fabrication.

WE ARE ASKING PRINCIPALS, COUNSELORS AND TEACHERS TO:

- Announce the contest at school staff and parent meetings.
- Encourage student participation at all Grade Level Categories
- Print out and distribute supplied Mobile Fab Lab Wrap Design Contest information sheets and posters

Odessa College Recruiting and Dual Credit personnel will be promoting the **Mobile Fab Lab Wrap Design Contest** during their visits to area schools, and Region 18 mathematics and science coaches will also be promoting this contest at school sites within the region.

For more information regarding the **Mobile Fab Lab Permian basin at Odessa College Wrap Design Contest**, contact:

Cedric Bleimling, Director, Mobile Fab Lab Permian basin at Odessa College at (432) 335-6189 – cbleimling@odessa.edu or

Frank M. Rich III, Executive Director of Marketing and Communications, Odessa College at (432) 335-6507 – frich@odessa.edu