

(#4)

Listing of MakerSpace projects and programs we may offer: The solution to problems are never to be confined to the classroom but made available in many diverse settings.

1. Drawing and fine arts classes.
Classroom-sized space where local artists will be invited to teach techniques and composition. Open to student age and artists in the community who want to expand their portfolios. The disciplines all start with drawing. Gallery for sales.
2. Photography, composition, film qualities, photo development.
Basics of 35 mm cameras, the lens settings, light control techniques. Film availability. Film development, Black and White advantages, Dark room tricks. Printing your own work. Phone camera, range, options.
3. Jewelry making.
Costume jewelry material gathering. Design sketching. Metal management for the piece to be created. Safety precautions when working with torches, safety glasses, soldering, security in placement of semi-precious stones. Photos of pieces as they are completed. Sales.
4. New toy designs and toy creation.
Avoiding patent restrictions, what's already out there, where the need is. Age group targeting. Board or electronic. Fantasy or life game. Starting with a goal and working backward. Built in quirks and problem solving.
5. New games creation based on math and physics.
Games characters introduction. Scope and degree of difficulty by age group defined. Multiple choice giving three choices based upon true-false. Success formula devised. Laws of physics will rule the formula.
6. Inventor's Lab using 3D modeling software, Autocad, PTC's Creo, and Google Sketchup.
The participants determine where their plan of invention lies and what it does to improve human or animal life. He/she must declare the purpose of their proposed invention. The laboratory will provide the cited software to assist the prospective inventor with available

software to assist. The inventor will record both progress and factors which led to temporary failure.

7. Woodworking.

Classes in the safe use of woodworking equipment. Supervised instruction on characteristics of wood types and their categories. Users will be from beginners to advanced. Students pay for the wood they use. Advanced students will be assisted in the varied furniture building. Reference material from furniture designers and builders of note world-wide. Furniture and bookcase kits may be developed and produced for sale.

8. Clock building.

A part of the woodworking where the student workers may advance, with their own designs of wall clocks, mantle clocks, up to and including grandfather clocks, ship's clocks. Wind up, battery powered or fully electric plug un pieces by student's choice..

9. Designing game pieces.

The game piece may be produced using the 3D printers in metal or other media. Chess, checkers, Monopoly and pieces for the games they have invented. Board game pieces for commercially produced games and full board games invented and produced by students.

10. Exotic bird houses.

Bird houses for individual birds and large multiple bird houses for Martins, all to be as inventive as possible in design and color combinations. Students pay for their own materials and may bring their own or buy the building material on site.

11. Mechanical Engineering workspace.

The workshop will provide instruction on the use of metalworking tools. The participants must develop their own worthwhile project from start to finish, to include spray painting if needed. Workshop clean-up as a part of every session

12. Engineering Design Kitchen (EDK) Design, prototype and deploying solutions to real-world engineering challenges.

To be patterned after the Rice University program where students with high engineering aptitude are given set problems with several

means of solution. They develop their selected solutions from the “kitchen” choices.

13. Computer research laboratory.

The laboratories are to be located in the MakerSpace area as well as in the Child Care Center for children’s games, the robotics workshops, the drone testing area and the 3D workshop and portable units will be available to the contestants in the robotics competition arena.

14. Graphic arts.

The studio will provide the desks, tables, easels and the essentials for students of all ages to exercise their initiatives within the discipline. This will include sign painting, commercial art and the use of media for videos and promotion of the student’s work.

15. Fabric applications, clothing design.

Familiarization with natural fabrics, chemically produced fabrics and their recommended use in upholstery, car and truck seat covers, male and female clothing, the design of the clothing and the cutting and sewing for use in each of the cited categories.

16. Music studio, classical plug-in listening stations, composition, copywriting.

Classical music listening presentations on CD’s,, videos and classical composer’s lives, with particular attention paid to the composer’s age, where they were trained and who was their patron. Introduction of the beginning of each of the modern music genre from pre-ragtime, ragtime, jazz, big band and classics rock.

17. Market Lab

An introduction to the world of investment, savings, starting a business, the need for a business plan and how to write one, where, when and how to adjust to changes. Following the market on computers

18. Models of planes and ships and radio controls.

Giant flying models of radial, in-line and jet powered radio controlled aircraft for advanced students and community enthusiasts. Large kits of radio controlled sailing and powered ships. Flying models of

smaller aircraft of all designs and ages from earliest to modern times. All are available through Amazon and other sources. Costs to be borne by builders.

19. Kites for all.

Kite designs and material provided at cost for builders. Japanese kite kits ranging from normal to abnormally large available for purchase. Combat kite kits for kite teams. Female kite teams may challenge male kite teams in flying skills on athletic field.

20. On-line computer research and design lounge or CAD/CAM with A1 production capabilities.

A lounge equipped with tables, chairs and bean bags where students and instructors can chat, advance theories, exchange ideas, challenge and exercise creative problem solving in small groups or individual situations.

21. Bifocal modeling lab.

A laboratory setting where specific scientific, technological, engineering and mathematical (STEM) unsolved problems are given the most logical means of solution by group or individual compromise to become examples of practical usage.

22. Transforming learning technologies laboratory.

A laboratory setting where students can delve into on-line technology germane to the particular discipline in which they are involved. This is the computerized version of an information library which can be staffed or it is an independent study opportunity.

23. Film lounge.

Old classic films, classic slap-stick comedy films, i.e., Buster Keaton, Laurel and Hardy, Keystone Cops from Amazon.

A place for relaxing, learning about each other, forming friendships and opening career possibilities in a no pressure bean bag atmosphere. Many coin operated refreshment opportunities.