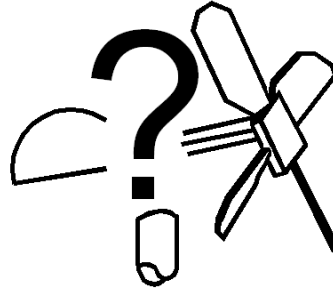


OFFICIAL RULES

KISHWAUKEE COLLEGE CAD TECHNOLOGY

“HIGH SCHOOL STUDENT CAD-DESIGN COMPETITION 2012”



1. PROBLEM

The basic premise of design is form must follow function.

Students are to design and construct a prototype of a “whirligig” incorporating as many of the six simple machines into their designs as possible. Those machines are:

Pulley
Wheel and Axle

Lever
Inclined Plane

Wedge
Screw

Students will submit a CAD drawing having a combination of working details and pictorial assembly electronically (for form) and post a video of their whirligig prototype in operation (for function) on YouTube.com. ®

A whirligig is a device of the bygone era of the Great Depression when money was scarce. Whirligigs allowed parents and grandparents an inexpensive way to entertain themselves and their offspring by making mechanical devices to animate figures by the wind.

2. ELGIBILITY

The competition is open only to students in, and around, the Kishwaukee College district of the following high schools:

Ashton High School
Belvidere High School
DeKalb High School
Dixon High School
Genoa-Kingston High School
Hiawatha High School

Indian Creek High School
Oregon High School
Paw-Paw High School
Rochelle Township High School
Stillman Valley High School
Sycamore High School

By participating in this competition, each participant assures he/she:

- 1) was granted permission for participant's participation by parent or guardian,
- 2) is attested as a student of one of the above schools by a principal or counselor,
- 3) has been, and will be, in full compliance with the competition rules herein,
- 4) grants the use of their name, likeness and quotes for publicity purposes.

Failure to comply with any term or condition in these competition rules may result in disqualification.

Participants will be required to submit proof of their eligibility by having their high school principal or counselor, and, parent or guardian, attest to their eligibility on a consent form that follows.

Kishwaukee College reserves the right, in its sole discretion, to determine whether eligibility requirements have been met or not.

3. SUBMISSION

Competition submissions must be received during the competition entry period of National Design Drafting Week as designated by the American Design Drafting Association (ADDA) March 26-30, 2012.

The competition submission must be emailed.

The video must be uploaded to YouTube.

The attached consent form must be postmarked no later than March 30, 2012.

Participants may submit only one entry. Late submissions will not be accepted.

4. REQUIREMENTS

- A. Drawing submission must be created and submitted via email as a DWG file.
- B. Drawing submission must be made on an 18x24 (C-size) sheet.
- C. The drawing sheet must include details of parts and a pictorial assembly.
- D. All submissions must be the original creation of the participant.
- E. Submissions must include the following title block information:

- 1) the name of the participant;
- 2) the title of the submission;
- 3) the age of the participant;
- 4) the email address and phone number of the participant;
- 5) the name of the high school where the participant attends school;
- 6) the number of hours invested in the submission;
- 7) the web address where the video of the working submission is located.
- 8) the names of any of the six simple machines the design incorporates.

F. A video of the whirligig design in operation using a fan is posted to YouTube.
(A fan is suggested for indoor filming with controlled lighting.)

DraftSight is a CAD program that creates DWG files available FREE on the Internet.

5. JUDGING

Representatives of the Kishwaukee College CAD Technology program will judge all eligible submissions. Entries will be judged according to the following weighted criteria:

40% - CAD Drawing E-mail Submission – Design Form
40% - Working YouTube Video Prototype – Design Function
20% - Ability to read and follow directions and conduct independent research.

By participating in this competition, participants agree to abide by these rules and accept the decisions of Kishwaukee College CAD Technology program judges as final.

6. WINNING AND NOTIFICATION

The competition winners will be announced in the month of April. Winners will be notified by phone and/or email. If for any reason a potential winner cannot be reached after reasonable attempts have been made, the competitor's high school will be notified and the prize left in the school office.

The Kishwaukee College CAD Technology program may post the winner's at:

www.KishwaukeeCollege.edu/cad

7. PRIZES AND CHANCES OF WINNING

Prize money is being collected to significantly impact the success of this event. Donor names will be publicized with the names of the winners at the conclusion of the competition.

First Prize – \$300 by Aaron O'Dell, Owner of VCO Development, Inc.

Second Prize – \$200 by Mark Schwendau, KC CAD Technology Instructor

Third Prize – \$100 by Mark Schwendau, KC CAD Technology Instructor

Odds of winning will depend on the total number and quality of submissions received. Prizes may not be transferred, traded, or redeemed for cash.

8. OWNERSHIP AND LICENSE

All submissions remain the property of the respective competitors with permissions granted for Kishwaukee College to use their submissions for publicity purposes in soft and hard copy formats in all media forms.

Submissions may be used, or not, at the sole discretion of Kishwaukee College.

9. TERMS AND CONDITIONS

Participating in this competition constitutes participant's full and unconditional agreement to, and acceptance of, the rules and terms herein. Participation in this competition constitutes the winner's consent to grant permission to Kishwaukee College to use the winner's name, likeness, and words and that of their work for publicity and promotional purposes.

BY PARTICIPATING IN THIS COMPETITION, EACH PARTICIPANT AGREES TO RELEASE AND HOLD HARMLESS KISHWAUKEE COLLEGE AND THEIR RESPECTIVE ADMINISTRATION, FACULTY AND STAFF, EMPLOYEES, AS WELL AS THE INDIVIDUAL JUDGES, FROM AND AGAINST ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF PARTICIPANT'S PARTICIPATION IN THIS COMPETITION, INCLUDING, WITHOUT LIMITATION, ANY CLAIM, DAMAGES OR LIABILITY OF ANY KIND.

ADDITIONALLY, KISHWAUKEE COLLEGE WILL BE HELD HARMLESS RELATED TO INFRINGEMENT OR VIOLATION OF INTELLECTUAL PROPERTY RIGHTS OR OTHER PROPRIETARY RIGHTS BY PARTICIPANTS THAT IMPAIRS THE INTEGRITY OF THIS COMPETITION.

KISHWAUKEE COLLEGE RESERVES THE RIGHT TO CANCEL THIS COMPETITION FOR ANY REASON.

10. USE OF PERSONAL INFORMATION

Kishwaukee College will use participants' personal information to notify participants about the competition and competition results. Participant's name, photographs and statements may be used by the college for publicity purposes.

11. PREPARATION

Participants are encouraged to follow a design process such as that of NASA. Extensive Internet research should be conducted relative to; whirligigs, the design process models, DraftSight® CAD software, making videos, design competitions, YouTube®, etc.

As a logical starting point, participants should download the DraftSight CAD

program, and related user's guide, and begin to learn how to use a CAD program. This entire task will take only a matter of hours.

12. PURPOSE AND LAWS

The purpose of this competition is to encourage students to consider a future in STEM (Science–Technology–Engineering–Math) fields of study.

This competition will be conducted in accordance with this mission and beliefs of the Illinois High School Association (IHSA).

13. MATERIALS

The whirligig prototype is to be made out of cardboard, corrugated or otherwise. Use of this material serves as a logical choice for this particular prototype and eliminates the need to use power tools. Any other fasteners and adhesives used with this material are acceptable.

The machine elements used to power the whirligig may be of other materials such as metal, rubber and plastic. Examples may include gears, cams, shafts, wheels, linkages, lead screws, springs, pulleys, belts, sprockets and chains.

The model may be painted, if so desired, but this will not impact judging.

14. PROJECT WORK ENVELOPE AND SIZE

The whirligig should be designed to occupy a space no larger than 18"x12"x12" (WxHxD) and should weigh no more than 10 pounds.

15. SAFETY

Student participants should construct their prototypes under adult supervision exercising caution AFTER proper education in how to use respective tools, materials, fasteners and adhesives.

16. COMPETITION HOST

Kishwaukee College
CAD Technology Program
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Malta, IL 60150
Ph. (815) 825.2086 X. 3480

Email address for submissions: Mark.Schwendau@kishwaukeecollege.edu

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KISHWAUKEE COLLEGE CONSENT AND ATTEST FORM

My son/daughter has indicated his/her desire to participate as a competitor in the "HIGH SCHOOL STUDENT CAD-DESIGN COMPETITION 2012".

It is my understanding my child will not have to travel to Kishwaukee College or be present to participate in this competition and all work on their entry can be completed at home or in their respective high school.

I understand my signature below attests to the fact that I have read the rules of this competition and am in agreement with the terms and conditions set forth in them.

I understand that Kishwaukee College will be held harmless in their role in hosting this event for area high school youth.

I understand that Kishwaukee College reserves the right to use the names, designs, pictures and words of the winners for publicity purposes.

I hereby give my permission for my child to participate in this competition.

Printed Participant's Name

Indicate (relationship as son/daughter)

Printed Parent's or Guardian's Name

Signature of Parent or Legal Guardian

Date

I attest that this participant is enrolled in this high school.

Printed Name of High School of attendance

Printed High School Principal's or Counselor's Name as attest

Signature of Principal or Counselor

Date