12th Annual ROBOFEST® 2011 Rules

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11th Annual World Robofest Championship, May 8, 2010, Southfield, Michigan

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  http://www.robofest.net/2011/ConsentReleaseForm.pdf

- Age Division Waiver Request Form:
  http://admin.robofest.org/2011/ageWaiverForm.pdf *or*
  http://admin.robofest.org/2011/ageWaiverForm.doc

- Robofest Video Submission Form:
- **http://admin.robofest.org/2011/RobofestVideoSubForm.doc** *or*
- **http://admin.robofest.org/2011/RobofestVideoSubForm.pdf**

Part 1 – Robofest 2011 General Rules

Robofest® is an affordable annual robotics competition aimed at increasing young students' interest, engagement, understanding and use of science, technology, engineering, and mathematics (STEM) through autonomous robotics. Robofest is an open competition, allowing teams to use any type of robotics platform and any programming language for the various competition categories shown in Table 1.

Competition Category*	Age Divisions	Team Size	Plat-form	Unknown factor	Assessment	Reg. fee**	Note
Game - BTOS	Junior (5-8th) and Senior (9-12th)	Max. 7	Any	Yes	Yes	$50	Each team uses a fully autonomous robot to play this year's game, Block the Oil Spill. See Part 2.
Exhibition	Junior (5-8th) and Senior (9-12th)	Max. 7	Any	No	Yes	$50	Each team has complete freedom to show off any creative autonomous robotics project. See Part 3.
RoboFashion & Dance Show	Junior (4-8th)	Max. 7	Any	No	Yes	$50	Two robots are recommended. Limited qualifying sites. See Part 4.

(*) World Championship will be held on May 7, 2011 at Lawrence Tech. Special competition category for every team: Team Photo Contest – See Part 1, Section 10.
(**) Per team. No refunds will be given; some qualifying sites may charge $20 ~ $25 Check-in fee; Sites outside North America may have different fee schedules.

Table 1. Robofest 2011 Competition Categories

Robofest also provides the following associate competitions for advanced teams. Official competition will be held during IGVC on June 4-5, 2011 at Oakland University, Michigan.

Competition Category	Age Divisions	Team Size	Platform	Unknown factor	Reg. fee per team	Note
Vision Centric Challenge (VCC)	High school Senior (9-12th)	Max. 3	Any vision based robot	Partly unknown	$50	For Talented high school and college students. See Part 5.
	College	Max. 2	Any vision based robot	Partly unknown	$50	
nVn Multi Robot Team Sumo	High school Senior	Max. 3	Any	Partly unknown	$50	In 2011, Two robots per team required. See Part 5.
	College	Max. 2	Any	Partly unknown	$50	
FIRST® Vision Challenge (FVC)	High school Senior	Max. 7	FIRST® vision system	Partly unknown	$50	Competition date may change. See Part 5.

Table 2. Robofest 2011 Associate Competition Categories

1 General Team Rules

A. <u>Team Formation</u>
1. Any organization, such as a school, home school, civic organization, club, etc. can form a team.
2. Age divisions and grade levels for each competition category are indicated in the tables. Grade levels denote the grade the student is in as of April 2011.
3. For any exceptions in a student's age or grade, the coach must submit an "*Age Division Waiver Request Form*" to Robofest administration for approval. The general rule is that playing up is fine as long as the student has exceptional talent in construction of the robot *and* computer programming, and has the maturity to work with other team members. Playing down is discouraged in general. The reason to request playing down must be specified on the form. For either playing up or playing down, coaches should obtain consent from their entire team and their parents.

4. Though not recommended in general, a team member may join multiple teams if the team coach approves. For example, a student can join a game team and an exhibition team from the same school/organization.

B. Team Registration
1. Teams are registered by a registered coach; a coach may have multiple teams at one qualifying site.
2. Team registration is processed on the web at http://www.robofest.net See Part 1, Section 3 "Registration Process" for a detailed description of the registration steps.
3. The registration deadline is 3 weeks before the competition date at each site. If a competition category at a site does not have 5 teams or more, teams registered at the site may be moved to another site; or teams can enter via video submission. (See Part 1, Section 8)
4. There may be a $20 ~ $25 check-in fee at a qualifying competition site, which will be used solely by the competition host site. Each qualifying site web page under the check-in fee section specifies the fee amount.

2 Team Coach Rules
A. Coach Qualifications
1. Coaches must be adults without any criminal record.
2. The coach must have a valid email address and must check the email account periodically. Email is the primary and official communication method between the team and the Robofest organizer. If a coach's email address is changed, it is the coach's responsibility to update the Robofest registration system by logging into the coach's Robofest account and making the change. To confirm an email address change, the system will send the coach a confirmation email. The coach will need to confirm by clicking on a link in the confirmation email.

B. Coach Registration Responsibilities
1. The coach is responsible for registering the team and entering and updating team information by the update deadline. Note that team members' personalized certificates will be printed based on the information and photos the coach enters on the website. Robofest will not reprint certificates for free due to incorrect information on the web. Please see Part 1, Section 14, "Reordering Certificates and Trophies."
2. Robofest 2011 has multiple qualifying competition sites. A coach using a coach ID must register teams for only one qualifying site. It is allowed, however, for a coach to setup another coach ID for another qualifying site to register different teams on a different date.
3. Team coaches must coordinate pre- and post-assessments to help Robofest administration gather data regarding students' learning of STEM subjects.

C. Coaching Teams
1. Coaches and adult volunteers must not do direct work on their team's robot(s). They should teach and/or provide necessary training for the team to solve the challenge problems.
2. We recommend that coaches recruit technical mentors or assistant coaches if necessary. Coaches are encouraged to contact local IEEE chapters (Robofest medal sponsor), ACM chapters, engineers' societies, robotics clubs, colleges, or universities to find volunteer technical mentors. The coach is responsible for entering up to 5 volunteer names and their roles on the web.
3. Robofest provides some technical workshops at LTU and/or online. There may be books or online resources available as well, and some multimedia curriculum is available for purchase.
4. The team coach is responsible for facilitating, transporting, and overseeing team members for team meetings and at Robofest competitions.

D. Sponsorships/Media
1. Another important role of the coach is to find sponsors for their team(s). Team sponsors are individuals, groups, companies or other organizations that donate cash, products, or in-kind services to the team. The Robofest website will list up to four team sponsors per team on the web.
2. Robofest attracts lots of media attention. Coaches must collect *Consent & Release Forms* not only for students, but also for the coach him/herself and team volunteers. These must be submitted to the hosting site during check-in, preferably by a coach.

3. Before and after Robofest, please contact newspapers, radio, and TV stations to recognize your teams' efforts and achievements. Let Robofest administration (robofest@LTU.edu) know if your teams were introduced in any media outlets.

3   Registration Process – Six Steps (See Figure 1 on next page for summary)

Step 1. **Coach Registration** form can be found on the web at www.robofest.net . After the registration form is submitted, a coach ID and password will immediately be sent to the coach by email from robofestoffice@gmail.com. COACH REGISTRATION IS CONFIRMED BY CLICKING A LINK IN THE EMAIL CONFIRMATION SENT TO YOU. If you do not receive the confirmation email, contact robofestoffice@gmail.com or 248-204-3569 to resolve the problem. (System or network problems or an incorrect email address in the coach registration form may be the cause.) Please check your spam folder, before contacting us. Veteran Robofest (2003 ~ 2010) coaches can use their prior coach ID and password. If you forgot your password, click on the "Forgot Password" link. If you forgot your coach ID number, please contact robofestoffice@gmail.com or 248-204-3569.

Step 2. **Team Registration** will begin right after the Kick-Off Meeting on December 4, 2010. Using the coach ID and password, the coach can create teams *after selecting **one** qualifying site*. During this step, the coach must accept the Robofest 2011 Coach's Pledge (Appendix 1). All the team member names, grades, and gender must be entered (student contact information is not made public). Exhibition teams must enter a short project description in this step including the theme of the exhibition, functionalities of the robots, the number and types of sensors and motors used, and any other information that describes the exhibition. Please register early, since a competition division of a site will be closed when the number of teams registered is equal to the maximum capacity for the division.

Step 3. **Registration Fee Payment**: After creating all of your teams, pay the registration fee online using a major credit card through PayPal. You will receive a payment confirmation email from PayPal, which can be used as a receipt. Or, you may choose the option to send a check payable to LTU Robofest to: ***LTU Robofest, 21000 West 10 Mile Rd., Southfield, MI 48075, USA***. Make sure to **WRITE THE TEAM NUMBER(S) IN THE MEMO LINE OF THE CHECK AND INCLUDE A HARD COPY OF THE PAYMENT PAGE FROM THE WEB WHEN YOU MAIL THE CHECK.** Your team registration will be complete once LTU receives the check.

Step 4. **Consent & Release Form**: Print the Consent & Release form and send it to students' parents. Get the signed forms from parents.

Step 5. **Team Photo Uploading**: Take a team photo and upload it to the coach account on the web. The requirements for the photos are: (1) standard **landscape** "jpg" file (width: height ratio should be 4:3 or 16:9) (2) size should be less than 350KB – if not, the file will be automatically resized (3) must show all the team members listed (4) adult coach and volunteers may be in the picture (5) must show the identifiable team ID and team name (write down or print the number on a paper and hold it when taking the photo *or* edit the photo file to add text). The team ID number is decided in **Step 2** above. If no photo is uploaded before the deadline, certificates for the team will not have team and/or robot photos. The photo must be uploaded within *3* weeks after the team registration *and* 10 days before the qualifying date. There will be special prizes for Best Team Photos.

Step 6. **Robot Photo Uploading & Final Update**: Take a photo showing your team robot(s), if your team wants. Upload the photo using the coach's web account 10 days before your qualifying competition date. The robot photo requirements are the same as in (1), (2), and (5) in **Step 5** listed above. At this step, coaches must be sure to update any team information on the web. The final update deadline will be *10* days before the competition date for each qualifying site. This is a hard deadline, as time is needed to print and ship all the participant certificates to each site.

(New) Coach | **Registration System www.robofest.org** | **Parents** | **Students**

Step 1
- New coach registration form
- New coach registration confirm email
- Confirmation Click
- Acknowledgement

Step 2
- Team registration form
- Team registration confirm email

Step 3
- Pay registration fee by PayPal *or* Check
- Payment Confirmation

Step 4
- Consent & Release Form
- Signed Consent & Release Form

Step 5&6
- Team Photo
- Robot Photo
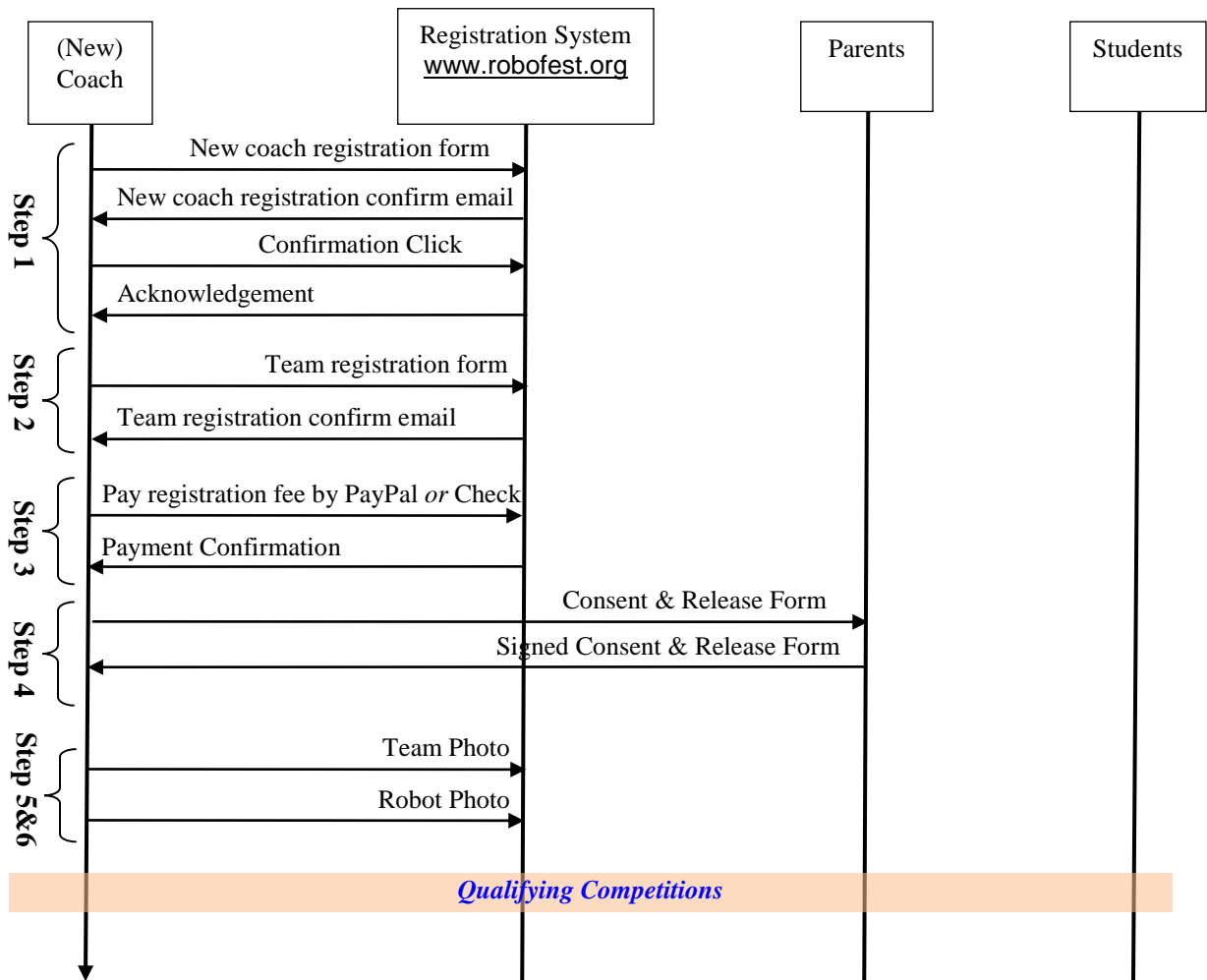
Qualifying Competitions

Figure 1. Team Registration Summary

4 Team Volunteers

The team cannot work without the help of various volunteers for jobs such as technical mentoring, financial sponsoring, transportation, constructing playing fields, preparing food, taking pictures, or videotaping, etc. The Robofest website will list up to five volunteers per team.

5 Common Sense Rules for Education

Construction of the robot body as well as all programming for the student competition should be done solely by the students. Parents, teachers, mentors, or coaches may not directly assemble the robots or directly write the program code for the team at any time during the preparation period or during the contest. Any direct participation is a violation of the rules. The offending team will become ineligible for any awards.

Only team members with name badges will be allowed in the pit (team table) area during the competition. **No adults are allowed in the pit area for all competition categories.** If a team coach must enter the area, they must receive permission from one of the judging proctors. It is strongly suggested, for security purposes, that the coach have assistants watch the team table area, especially when the team is competing. **The use of cell phones by students in the pit area is prohibited. WI-FI in the pit area must be turned off.**

6 Robofest Assessments

For the Robofest 2011 season, we will continue to assess the impact of autonomous robotics competitions in STEM education. Competitions can drive students to work harder resulting in improving skills. We believe that students participating in robotics competitions will hone STEM skills and demonstrate skills they would not have gained outside of the competitions. To prove this we need measurable data to quantify the student's experiences. We can use this data to highlight successes and determine areas of improvement. The purpose of the assessment is to quantify and analyze students' improvements in STEM skills through autonomous robotics competitions. The result will also show how effective a robotics competition is at educating them. They will be assessed before and after the competition to see the level of improvement. Another group of students who did not participate in the competition will act as a control group and take the same pre- and post- assessments.

Pre-assessment instruction will be sent to coaches in January. Coaches will receive post-assessment instruction in early April. This assessment is anonymous. This assessment research may be published in a journal on educational technologies.

7 Team's Responsibilities on Robofest Competition Day

- All teams must observe the check-in time set by the host organizer for each site.
- Things to bring to the Robofest venue
    - Robot(s) and spare parts
    - A laptop or other computer for each team (To solve unknown factors or adjust to the lighting conditions each team must bring a computer. It is *not* recommended that teams share computers.)
    - *Only for exhibition teams*: poster boards to introduce the exhibition description and all the necessary materials for the exhibition
    - A power strip and power cable
    - *Lego RCX robot teams only*: Cardboard box to cover your robot and IR tower
    - Extra batteries or charger
    - Signed Consent & Media Release forms for team members, coach, and team volunteers – *required*.
    - Check-in fee, if your qualifying site charges a check-in fee. Check out your site home page.
- Teams must use the team table assigned by the organizer. Please do not change team tables. If you change, judges and the organizer *will not be able to* find your team.
- Read the competition rules carefully.
- *Lego RCX robot teams only*: whenever new programs are downloaded, both your robot and the IR tower MUST be covered by a box. If not, you may damage other robots and/or your program may be corrupted. Do not forget to bring an IR opaque cardboard 'garage' to house your robots and IR tower.
- Also see attached "Typical Qualifying Robofest Competition Schedule", Appendix 2.
- General Rules During the Robofest Competition:
    - No food or drink is allowed inside the contest area.
    - Flash photography is not allowed inside the competition area
    - Do not make unnecessary noise which might disturb other teams in the pit area. Be respectful of all teams.

8 Rules for Video Submission Entry for Qualifying (Not for Regional Championship)

If there is no qualifying site near the team location (or under special circumstances) the teams may register on-line for Video Submission. Video submission teams are required to pay the same registration fee. The coach must submit a signed *Robofest Video Submission Form* when sending the video to:

>LTU Robofest
>21000 West 10 Mile Rd.
>Southfield, MI 48075, USA.

It must be received, *not* postmarked, by the deadline, Sat. April 2, 2011. The following are the suggested video contents:
- Start with the team ID/name and team member introduction, around 5 seconds for each member.
- Introduce features of the robots, around 5 seconds for each robot.
- Demonstrate the game, RoboFashion, or exhibition. The video should not be edited once the demo has started. See Game rules as well as the submission form for details about how to prepare the video.
- Rolling credit and/or acknowledgement (recommended).

- Acceptable video media: CD with a video file, Video CD, or DVD (email with a video sharing site link to Robofest@LTU.edu is also acceptable and encouraged.)

Adults may help produce the video. If students were involved in the video production work, it should be acknowledged in the credits. Please also attach hard copies of the source programs.

9 Judging and Prizes

About 20**%** of the total number of teams at each Qualifying Competition will win trophies to be presented during the award ceremony. Detailed judging rules are explained in each competition rule. Every officially registered team member will receive a certificate of achievement and a medal during the award ceremony of the qualifying competition. All teams must stay for the closing ceremony.

10 Special Competition: Team Photo Contest

The best team photos will be selected from the uploaded team photos. Every team is automatically entered once their team photos are uploaded. Selected team photos will be presented on a screen during the World Robofest 2011 Championship before announcing the winners. Selection criteria includes: team spirit, unity, harmony and uniqueness. In addition, we are checking if the number of students in the photo is same as the number of students in the system. Please be aware the promptness in posting the photo will be an important criterion in selection. A deduction will be made if the team photo was uploaded more than **3 weeks** after the team was registered.

11 Qualifying Competitions

A team must be registered at a local qualifying site registered at www.robofest.org regardless of the team country. Any exception must be approved by the Robofest office in advance. Official rules for each competition category detail how teams will be ranked during that specific competition. The total number of teams advancing from each qualifying site/competition category will be decided in proportion to the number of teams registered at the site. Early date qualifying sites will advance more teams than late date sites. The number of teams qualifying for Regional Championships will be determined by the Robofest office after registration closes.

12 Regional Robofest 2011 Championships

Winning teams from numerous (U.S.) and international Qualifying Competition sites must compete in a Regional Championship to qualify for the World Robofest 2011 Championship.

- For teams from Asia-Pacific: Regional Championship will be held in Korea on January 21, 2011
- For teams from Michigan qualifiers: A Michigan Regional Robofest Championship will be held on April 16, 2011 at Lawrence Tech. There will be no check-in fee.
- All other teams should be screened at Video Regional Championship. Game teams do not need to submit videos. Scores from qualifying events will be used to select teams to advance to the Worlds. However, Exhibition and RoboFashion & Dance teams need to submit video sharing site links via email to Robofest office (Robofest@LTU.edu). Therefore it is highly recommended to video-record presentations during qualifying competition. The deadline of the email submission is Sat. April 9, 2011, noon.

13 The World Robofest 2011 Championship

Top Game, RoboFashion, and Exhibition teams from the Regional Championships advance to compete in the World Robofest Championship at Lawrence Technological University on Saturday, May 7, 2011. Total of 60~65 teams will be invited. Teams must be present to compete at Worlds - video submissions will not be allowed. Team Members of the top Senior Division teams at the World Robofest Championship in Game and Exhibition will receive $2,000 LTU annual renewable scholarships. Sr. and Jr. winner teams will win prizes donated by Robofest 2011 sponsors. Some Exhibition teams may get development grants, if funds are available.

14 Reordering Certificates and Trophies

Robofest is pleased to provide certificate re-printing services for a minimum charge. Also, winning teams can order multiple trophies or certificates of award with individual names on a fee basis through Robofest office. Visit 2011 link on the Robofest home page for details later.

Part 2 – Robofest 2011 Game Competition Rules

The name of the challenge for the 2011 competition is "Block The Oil Spill (BTOS)". Although Robofest allows up to seven members, we recommend four or five members per team to better engage students. Game rules are on the web at: www.robofest.net and click on the 2011 link. These rules may be revised or refined during the season. Coaches are required to check the website and/or read emails. A streaming video of a practice game is available on the same link.

Part 3 – Robofest 2011 Exhibition Competition Rules

The robotics exhibition is a great way for students to show off their imagination and creativity. Each team has complete freedom to create autonomous robotics projects such as robot pets, robot artists, dancing robots, storytelling with robots, robots for scientific experiments, and practical robotics applications. Teams are composed of one to seven members. In general, two students are recommended per robot. Computer controlled robots may be of any size and can use any material as long as it is safe for team members as well as spectators. Even though human controlled remotes are not allowed, *unlike the Game*, wireless host computer program control is allowed. Robot to robot as well as human to robot interactions is encouraged. Sensors must be employed to assure the robot is interacting autonomously with its environment. To promote power & energy related science projects, some free energy sensors will be available for high school students to use in their exhibition. Please go to www.robofest.net and click on Exhibition link for exhibition in previous years.

On the day of the Robofest competition, each exhibition team will be given a table on which to demonstrate the robots. After the opening ceremony, teams will have **4** minutes to explain and demonstrate their robotics project to the public possibly using a wireless microphone. Judges will visit the team table to ask additional questions and inspect program code anytime before the final judging. "Silent Judges" may visit teams throughout the day to ask questions, check displays and observe interactions with spectators. These judges will not identify their roles.

Teams must bring all the necessary materials for the exhibition. For example, if the exhibition needs background music, the team must bring the music file. The sound system in the hosting site may not be available to play your music. Therefore, it is highly recommended to contact the site host in advance and/or bring a player, too. Teams are requested to bring poster boards to describe their projects. Hardcopies of programs to give to the judges are a plus, but not required.

We highly recommend each exhibition team publish a video clip on a video sharing site such as SchoolTube (www.SchoolTube.com) or YouTube. Judges will use this to preview the team projects and the team will get better scores for the presentation methods category. Teams should plan to show their video to the Judges in case they did not have an opportunity to view the video prior to the competition. The exhibition team coach can update the video information and the URL using the Robofest account.

Awards and advancing to World Robofest are determined based on the following criteria:

Wow! Factor and public demonstration performance (reliability)	20%
Originality (creativity and imagination)	20%
Application of math and science concepts – VERY IMPORTANT	**25%**
Presentation methods and student attitude for spectators; Information on the team poster; Information on the Internet such as SchoolTube	10%
Source code and robot inspection	10%
Size, complexity and number of functions	5%
Usefulness / Practicality	5%
Entrepreneurial ideas and mindset; others	5%

Teams are strongly encouraged to choose unique project topics, and may risk losing points for creativity or other categories by choosing to continue a prior year's project. Teams with continuing projects must:

- Add new features and/or significantly improve or change one or more features
- Describe the addition and changes in the project description text area of the online team registration form
- During the official presentation, inform judges that their project is a "continued" form of a previous project

Spectators will decide People's Choice Awards only during World Robofest and Michigan Regional.

Part 4 – RoboFashion & Dance Show Rules

Robotics in education creates innovative and stimulating classroom environments in which students have fun, are excited, and are motivated to learn math, science, and technology. The RoboFashion & Dance Show category has been created in order to get students interested in math and science at a younger age.

In this competition, a team of robots will use two 30" x 72" tables to create their performing stage arranged as they decide (without walls) to show off their costumes, walk (drive), and perform to music. Teams must bring their stages to the competition site. Detailed rules and judging rules can be accessed from the web at www.robofest.net and click on the 2011 link. These rules may be revised or refined during the season.

Part 5 – Associate Competition Rules

Robofest provides the following associate competitions for advanced teams. There will be some competitions in the spring 2011. Final competition will be held during IGVC on June 4-5, 2011 at Oakland University. Teams are required to register using the steps in Part 1 Section 3.

Vision Centric Challenge (VCC)

The contestants are to use any robotic platform with a vision system and implement vision guidance software to allow the robot to maneuver a given obstacle course. There are high school and college divisions. Detailed rules and supporting materials can be accessed through the web page http://www.robofest.net/collegiate . These rules may be revised or refined during the season.

2v2 Multi Robot Team Sumo

Robot sumo is one of the most popular robot competitions in the world. As an associate competition of Robofest, we launch what is believed to be the world's first multi robot team sumo robot competition with two robots for each team in 2011. Rules can be found at www.robofest.net and click on nVnRoboSumo link.

FIRST® Vision Challenge (FVC)

Robofest will provide workshops to program the FIRST robot's vision system and hold a competition to recognize traffic signs and/or direction of arrows. For more details, visit www.robofest.net and click on FVC link.

Robofest 2011 Coach's Pledge

As a Robofest coach, I have read and agree to abide by the Robofest 2011 rules (http://www.robofest.net/2011/robofest11rules.pdf) as they exist now and as may be set forth or amended during the Robofest season.

As a coach, I am responsible for communicating and enforcing the Robofest rules to team members, team volunteers, and others affiliated with my team.

I understand that any rule updates, guidelines, additional information, and announcements will be communicated to me primarily via emails and web updates. I am responsible for reading the information and I will relay it to all the people affiliated with my team. If there are any changes in my email account, I will notify Robofest administrators as well as update my coach profile.

As a Robofest Coach, I understand that the students come first. Robofest is about students learning computer technologies, science, engineering, and mathematics. Everything my team does starts and ends with the principle: **the students do all of the work**. My team members will do the designing, building, and programming of the robot. Adults may help them find the answers, but cannot give them the answers or make the decisions in detail.

Acceptance of this pledge signifies my intent to uphold and maintain the Robofest spirit.

This will be signed when coaches register teams on-line.

Appendix 2:

Typical Qualifying Robofest Competition Schedule

(Assumption: eight Jr. Game, six Sr. Game, and five Exhibition or Fashion Show teams; plus **three** official Game playing fields. There is no official lunch time, but a food concession stand may be open.)

8:00am	**Doors Open and Check-In begins.** Find your team table after check-in. Both practice and official playing fields are open for practice. Setup exhibitions.
9:00am	**Opening Ceremonies** • National Anthem • Opening Remarks • Introduction of Judges • Explanation of key Robofest competition rules
9:20 – 9:30am	**Unveiling the Playing Field (1) for the Game teams** (No adult allowed in the pit from this point)
9:30 – 10:00am	**Official presentation and demonstration of Exhibitions** and **RoboFashion and Dance Show.** (6 min x 5 = 30 min) Game teams work on unknown factors.
10:00am – Noon	Exhibition and silent judges will visit exhibition team tables for interviews
10:00 – 10:05am	**Game Robot Collection**
10:05 – 10:40am	**Round 1 Jr./Sr. Game competition** begins on three Game playing fields in parallel. Teams compete in a pre-determined order set by the site host. Two or three teams will be timed and judged at the same time. Each round will be 7 minutes on average in length, which includes**:** • Move-in (2 min), • Team introductions (max 1 min), • Play (2 min), and • Move-out and return robot to holding area (2 min). With 14 Game teams, there will be five Round 1 competitions for a time of 5 x 7 = 35 minutes; 10 minute break;
10:45am	**Unveiling the Playing Field (2)**
11:15 – 11:20am	**Game Robot Collection**
11:20 – 11:45am	**Round 2 Game competition** begins in reverse order or as determined by the site host for a second round as outlined above (minus team introductions), 5 x 5 = 25 minutes.
11:45am – Noon	**Break.** Judges tabulate final scores.
Noon	• **Recognition of Coaches, Teams, and Team Members:** Coaches will award Medals and Certificates of Achievement to students • Take a **group photo with everyone**. The group photo must be submitted to Robofest office for official 2011 video. Music is recommended at this time.
12:15pm	**Awards and Closing Ceremony**: Judges should line up and congratulate winning teams. See the illustration below. Also, announce the teams to advance to Regionals.
12:25pm	**Recognition of Volunteers** **Volunteer Group Photo / Cleanup**

Trophy table	Host & VIP	Judges lined up

Winning team's walking path toward the trophy

← **Audience**