YOUR FINAL_project ASSIGNMENT

Your group must make up a new or a variation of an old fun game that you can share with the other Math 391 students in about a 20-minute session. In addition to your in-class presentation, your team will create a game resource template for the class to take home. The game should be designed for classroom use (elementary or middle school) but your in-class final presentation will be geared towards adults. The topic of your game should relate to the material studied in Math 391.

THE IN-CLASS PORTION OF THE FINAL PROJECT

FIRST FIVE MINUTES (NO MORE)

✓ Your team describes your game and demonstrates a quick round of the game. To start your in-class presentation, your team will describe your game and give a quick demonstration of the game (at least one round of the game) to the (adult) audience.

You must have some supportive materials so the class can follow your presentation. This may be:

  o Showing a prepared poster
  o Showing prepared overhead slides
  o Showing some other professionally prepared presentation device

SECOND / THE NEXT 15 MINUTES

✓ Your team leads the rest of the class in playing sample rounds of your game. In order for the rest of the class to play your game, your team must create (or gather) the appropriate materials & create handouts (game boards, etc. as needed) for the audience (two groups of four students) to play sample rounds of your game. You may choose to move the class around.

THIRD

✓ Dr. Fung will pass out your prepared game template and the other teams will assess your game, your presentation & your game resource template. This is not part of your timed 20 minutes.
THE  
"CREATE A TAKE HOME REFERENCE TEMPLATE"  
PORTION OF THE FINAL PROJECT

✓ Your team must use the class form (391 web page) to create a lasting reference template for the rest of the class that describes your game as they will use it in their ELEMENTARY OR MIDDLE SCHOOL CLASSROOMS.

✓ Your created template should be a complete reference that someone can look at five years from now and use to completely understand how to set up and run your game.

✓ Your Game Resource Template MUST be typed on the blank form available on the class web page.
  o  *PLEASE do not just re-type the template—you will lose formatting details.*

✓ The Game Resource Template is an important part of your final project; EVERYONE in your group should carefully work together on the template.

✓ USE the template directions while your team is working on your game resource template.

KEEP TRACK OF ALL OF YOUR FINAL GAME PROJECT WORK THROUGHOUT THE PROJECT. RECORD THIS INFORMATION ON THE FINAL TEAM EVALUATION AND TIME LOG PAPERWORK
## FINAL PROJECT TIMELINE

DATES POSTED ON YOUR COURSE WEBPAGE

<table>
<thead>
<tr>
<th>STEPS</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step One</strong></td>
<td><strong>Choose a Team</strong>&lt;br&gt; ✓ We will have _____ groups with _____ students each. You may choose your own team members.&lt;br&gt; ✓ Sign your group up by telling Dr. Fung your four team members.</td>
</tr>
<tr>
<td><strong>Step Two</strong></td>
<td><strong>Team Contact</strong>&lt;br&gt; ✓ Share phone numbers and email addresses with your group.</td>
</tr>
<tr>
<td><strong>Step Three</strong></td>
<td><strong>Decide on a Game</strong>&lt;br&gt; ✓ Each team must choose a game topic and have it approved. Pick the topic and tell the topic to Dr. Fung.&lt;br&gt; ✓ You may not use any games presented during your lesson plan presentations.&lt;br&gt; ✓ Each team must present a different game.</td>
</tr>
<tr>
<td><strong>Step Four</strong></td>
<td><strong>Create Preliminary Outline</strong>&lt;br&gt; ✓ The Preliminary Outline describes your game, your beginning presentation (first 5 minutes) and your game play ideas (next 15 minutes).&lt;br&gt; ✓ Use the provided outline form, only one outline per group needs to be filled out and turned in. Be sure to WORK AS A TEAM.</td>
</tr>
<tr>
<td><strong>Step Five</strong></td>
<td><strong>Work on Resource Template</strong>&lt;br&gt; ✓ DON'T START until your game is approved&lt;br&gt; ✓ Your entire team should work on the template&lt;br&gt; ✓ USE the Game Resource Template Directions to avoid time-consuming &quot;re-drafts.&quot;</td>
</tr>
</tbody>
</table>
# FINAL PROJECT TIMELINE
**DATES POSTED ON YOUR COURSE WEBPAGE**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>DETAILS</th>
</tr>
</thead>
</table>
| **Step Six**                       | Please turn in:  
  ✓ A filled out template cover sheet  
  ✓ Your template draft (typed on form from the Math 391 page)  
  ✓ Drafts of any student and materials pages / at the very minimum a clear sketch of these pages  
  ✓ Your team must come to class on 12/1 or to Dr. Fung’s office hours prior to class on 12/1 to review the template draft and to hear revision and editing comments. |
| **Step Seven**                     | ✓ Complete working on your Game Materials.  
  ✓ Edit your template draft and turn in  
  Please turn in:  
  ✓ A filled out template cover sheet  
  ✓ Your final template draft  
  ✓ Final copies of your student and materials pages  
  ✓ Check in with Dr. Fung if you need copies of game materials, score sheets, student pages, etc.  
  ✓ Practice your in-class presentation |
| **Step Eight**                     | ✓ Have a final meeting with your team and fill out the “Final Project Team & Individual Participation Evaluation” forms |
MORE FINAL PROJECT DETAILS

WHAT DR FUNG & THE MATH DEPARTMENT CAN PROVIDED

✓ Photocopy services (the template and any in-class or template material pages, paper or overhead). We have a variety of colored paper and colored card stock.

✓ Blank poster board

✓ Any classroom set of manipulatives available in the math department

✓ Please use the TEMPLATE COVER SHEET to communicate your materials needs with Dr. Fung.

WHAT YOU AND YOUR TEAM ARE RESPONSIBLE FOR

✓ CREATING THE GAME RESOURCE TEMPLATE page and giving it to Dr. Fung to photocopy.

✓ Turning in a copy of ALL materials (score sheets, student pages, etc.) with your TEMPLATE DRAFT and, of course, with your final template.

✓ “GATHERING” MANIPULATIVES, GAME PIECES, ETC. Dr. Fung may be able to help. Some pieces may be available for Die Cutting in the Curriculum Lab. Many items are available for check out from the math department.

✓ KEEPING TRACK OF THE TIME YOU SPEND ON YOUR FINAL PROJECT.

FINAL PROJECT ASSESSMENT

Team and Self Assessment

✓ Each team member keeps track of his or her individual time spent on the final project.

✓ The team meets and review the time each person spent on the final project

✓ Individuals evaluate self and team performance and assign self and team members a “participation %” based on “Individual Effort Applied to Final Project Backed Up by Time Spent on Project.” Ideally, this will 100% for each member in your team.
Math 391 class & Dr. Fung Assessment

✓ Dr. Fung AND THE REST OF THE CLASS will evaluate your final project. There will be a brief evaluation period following your in-class 20 minute presentation. This assessment will cover:

- Quality and clarity of presentation (team shares equally, organized, practiced, prepared, professional)
- Game Materials Quality
- Game Quality for Future Use (useful, fun, interesting)
- Game Resource Template Quality (complete and useful as a resource)

✓ See the sample copy of the assessment form

AFTER ALL OF THE IN-CLASS PRESENTATIONS
✓ Dr. Fung will review and record the information in

- The class evaluations of your presentation and template
- Your team logs and team evaluations

✓ Each team member will be assigned a PARTICIPATION PERCENT. This will be based on the AVERAGE of the participation percent scores given to you by your team members and your self-evaluation.

✓ Dr. Fung will add up all of your points and multiply them by your PARTICIPATION PERCENT SCORE. This will be your final project score.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Points</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in choosing Game &amp; in preparing Outline</td>
<td>5 points</td>
<td>5 points</td>
</tr>
<tr>
<td>Dr. Fung's Evaluation of your Final Project</td>
<td>25 points</td>
<td>25 points</td>
</tr>
<tr>
<td>Class Evaluation of your project (each team)</td>
<td>10 points</td>
<td>20 points</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td></td>
<td><strong>50 points</strong></td>
</tr>
</tbody>
</table>

SEE THE NEXT PAGE FOR AN EXAMPLE OF A FINAL PROJECT SCORE
EXAMPLE FINAL SCORE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>YOUR SCORE</th>
<th>POSSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Find Game &amp; Prepare Outline</strong></td>
<td>5 points</td>
<td>5 points</td>
</tr>
<tr>
<td>You and your team agree that you shared equally in the work for these items</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dr. Fung’s Evaluation of your Project</strong></td>
<td>20 points</td>
<td>25 points</td>
</tr>
<tr>
<td>Rating of your In-Class Presentation and your Game Resource Template (the same categories as the class evaluations with 2.5 times the points)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Class Evaluation of your project</strong></td>
<td>18 points</td>
<td>20 points</td>
</tr>
<tr>
<td>10 points possible for each of two other teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>YOUR INITIAL TOTAL</strong></td>
<td>43 points</td>
<td>50 points</td>
</tr>
</tbody>
</table>

INFORMATION FROM THE TEAM PARTICIPATION / EVALUATION NOTES

THIS IS THE TEAM AND SELF ASSESSMENT

Your Self-Participation Percent Score  95%
Team Member #2’s Participation Percent Score for you 100%
Team Member #3’s Participation Percent Score for you 90%
Team Member #4’s Participation Percent Score for you 100%
YOUR AVERAGE PARTICIPATION PERCENT SCORE 96.25%

YOUR FINAL PROJECT SCORE:  43 points X 96.25% = 41.4 points

Special Note:
Any student may come by my office hours if they are having any issue with their group. Ideally, if everyone approaches the project responsibly, this should be a smooth and easy project to work on!

HAVE FUN, THE WHOLE POINT IS TO HAVE FUN!!!!
GAME RESOURCES TEMPLATE DIRECTIONS

ALL DETAILS MUST REFER TO USE IN AN ELEMENTARY OR MIDDLE SCHOOL

GAME TITLE

Give the title of your game

GAME CREATORS / REFERENCE

List your names.

Explain very briefly how you came up with your game design; include a reference if you used any ideas from a web, text, etc. resource.

GAME DESCRIPTION

What is the game about? Explain briefly.

✓ DO NOT explain how to play the game.

✓ Think of this as a game description on the outside cover of a game box.

MATH SKILLS EMPHASIZED

Describe the mathematical skills your game emphasizes.

GAME PLAYER CONFIGURATIONS

Describe the player configuration for the typical elementary or middle school classroom (students play individually, in pairs, in teams of four...?)

✓ Do not refer to Math 391.

NEEDED MATERIALS FOR ELEMENTARY OR MIDDLE SCHOOL CLASSROOM
List the needed materials to play the game in the elementary or middle school classroom. Be sure to specify if the materials are just for the teacher, per player, per team, etc.

Carefully describe how to make the materials for the game if they are not commonly available for the elementary or middle school classroom.

Note all materials that you have included with the template (e.g., copy card template (included) and....)

NOTE: Keep in mind the whole idea is that someone must be able to look at your template and your materials list and prepare the game. The best games (for future use) have easy to use and duplicable materials.

✓ Do not refer to Math 391.

THE CLASSROOM / HOW TO PLAY THE GAME NOTES FOR THE TEACHER

Describe to the teacher what they will need to do to prepare, set up and run the game:

BEFORE the game
✓ Include comments about gathering materials and material preparation

DURING the game
✓ Include directions on how to play the game, game rules, etc.

AFTER the game
✓ Include comments about possible follow up or assessment

Possible game EXTENSIONS
✓ List at least one possible extension to your game