

Inductive – Unknown -- needs to take shape

1. What does the team know about project?
2. What does the team know themselves?
3. Who are the stakeholders/audience?
4. What will the finished product look like?
  - a. Stretch
  - b. Future
5. Roles and expectations
6. Value Added
7. Setup

<p><b><u>Strengths</u></b>                  Open Source Contributions                  Individual Strengths</p> <ul style="list-style-type: none"> <li>• Coding</li> <li>• Communication</li> <li>• Design</li> <li>• Editing</li> <li>• Connections (professional – college)</li> </ul>	<p><b><u>Opportunities</u></b>                  Anticipate/Answer Questions                  Distinct deliverables                  Outcomes – scope</p>
<p><b><u>Challenges</u></b>                  Aggressive Scope                  Deadlines</p>	<p><b><u>Weaknesses</u></b>                  Resources (time)                  Non-Experts                  Inherent Risks</p>

**This Week:**

1. Project Direction – Citytech, CUNY, Communities and High School
2. Scope
3. Setting Infrastructure

**Next Week:**

1. Slack and google docs
2. Read chapter on Audience
3. ‘Soup to nuts’ list of stakeholders – template – spreadsheet
4. What are we producing?
5. What are everyone’s role?
6. Deadline for V0.1 – September 20
  - a. What are we trying to accomplish? How to make it relevant to communities CUNY serves.
  - b. Next week – plan to achieve v0.1

## Class Notes – Audience 9/13/18

### Factors:

- Power
- Skills/Knowledge
- What's in it for me?

### Departments – who will use?

1. CS/CE/CST
2. EET / TELCOM
3. CTTE
4. COMD
5. MECH

### People – Level of interest/contribution

1. Acquaviva (PHYS)
2. Dixon (BUS)
3. Oudjehane (CST)
4. Zhang (MECH)
5. Gailani (MECH)
6. Marantz (EET)
7. Seto (BIO) – 3D Printer
8. Shields (CONST MGMT)
9. Villatoro (CONST MGMT)
10. Ellis (ENG) – Sci FI
11. Sutton – cool shit

### People – who do we NEED?

- ❖ Soifer – President's office

Dean's – down the road

- ❖ Smith – Dean (working on something else)
- ❖ Hom -- Dean
- ❖ Poritz-Vasquez – Dean (IOU)

- ❖ AP Brown
- ❖ Chief Academic Officer - Bonny
- ❖ Jordan – Faculty Commons – willing to listen to crazy ideas

lations,

programming),

statistics,

Health Services

Radiologic Tech & Medical Imaging

Mechanical Engineering Technology



Soiffer - Pres. office  
Smith  
Horn  
Poritz-Vasquez  
AP Board  
August  
Jordan

- schedule
- team org chart
- Stakeholder grid  
↳ filled out
- NO.1 what the fare we doing;

th  
logic  
nical E

- 1) what does the team
- 2) what they know
- 3) Stakeholders
- \* 4) Product - <sup>mvp</sup> <sub>structure (features)</sub>
- 5) Roles - Expectations
- 6) Value added →

2 weeks - UO. /  
 1 week - plan  
 0. week - project  
 direction  
 - scope  
 - setting  
 infra

# SWOT

<p><u>Strengths</u></p> <ul style="list-style-type: none"> <li>- open source</li> <li>contribution</li> </ul>	<p><u>opportunities</u></p> <ul style="list-style-type: none"> <li>- distinct</li> <li>deliberate</li> <li>- answer question</li> <li>- outcomes - C...</li> </ul>
<p><u>Challenges</u></p> <ul style="list-style-type: none"> <li>- communication</li> <li>- scope</li> <li>- group</li> <li>- dead weight</li> <li>- document</li> <li>- contributions</li> </ul>	<p><u>Weaknesses</u></p> <ul style="list-style-type: none"> <li>- non-expert</li> <li>- resources</li> <li>- inherent risk</li> </ul>

- Owners of Schools
- Principals
- Deans, Teachers
- Dept. Heads, Students
- School Districts,
- Community Organization  
(Education driven)

- AWS, Microsoft, Google  
(cloud computing)

- Michel Hodge  
VP of Enrollment  
& Student Affairs  
in City Tech

- Dr. Hernandez  
CEO of clinic  
Prof. at Lehman

- Dept. electrical  
Telecomm. &  
engineering in  
City Tech

Pro  
Jo  
Viv  
B.  
A

## Professors

John Dixon - Marketing, student relations,  
Motivation (SD)

Viviana Acquaviva - Machine learning (programming),  
Physics, (Astrophysics?)

B. Oudjehane - Robotics (master's), Mathematics,  
Problem solving

A. Zhang

Depts. - who will use?

~~CS/CE/CST~~ CS/CE/CST

~~EET~~ EET ↔ TELCOM

CTTE MET

COMD

People - who will contribute

Aquaviva (PHY) Morantz (EET)

Dixon (BUS) Jordan

Oudjehane (CST) Seto (BIO)

Zhang (MECH) Shields (CONSTR)

Gailani (MECH) Gilliam

Ellis → Sutton

engineering in  
City Tech



Soiffer - Pres. office  
Smith  
Horn  
Poritz-Vasquez  
AP Board  
August  
Jordan

- schedule
- team org chart
- Stakeholder grid  
↳ filled out
- NO.1 what the focus  
we doing;

th  
logic  
nical E

- 1) what does the team
- 2) what they know
- 3) Stakeholders
- \* 4) Product - <sup>mvp</sup> <sub>structure (features)</sub>
- 5) Roles - Expectations
- 6) Value added →

2 weeks - UO. /  
 1 week - plan  
 0. week - project direction  
 - scope  
 - setting infra

# SWOT

<p><u>Strengths</u></p> <ul style="list-style-type: none"> <li>- open source contribution</li> </ul>	<p><u>opportunities</u></p> <ul style="list-style-type: none"> <li>- distinct deliverables</li> <li>- answer question</li> <li>- outcomes - C...</li> </ul>
<p><u>Challenges</u></p> <ul style="list-style-type: none"> <li>- communication</li> <li>- scope creep</li> <li>- dead weight</li> <li>- document contributions</li> </ul>	<p><u>Weaknesses</u></p> <ul style="list-style-type: none"> <li>- non-expert resources</li> <li>- inherent risk</li> </ul>

- Owners of Schools
- Principals
- Deans, Teachers
- Dept. Heads, Students
- School Districts,
- Community Organization  
(Education driven)

- AWS, Microsoft, Google  
(cloud computing)

- Michel Hodge  
VP of Enrollment  
& Student Affairs  
in City Tech

- Dr. Hernandez  
CEO of clinic  
Prof. at Lehman

- Dept. electrical  
Telecomm. &  
engineering in  
City Tech

Pro  
Jo  
Viv  
B.  
A

## Professors

John Dixon - Marketing, student relations,  
Motivation (SD)

Viviana Acquaviva - Machine learning (programming),  
Physics, (Astrophysics?)

B. Oudjehane - Robotics (master's), Mathematics,  
Problem solving

A. Zhang

lations,

programming),

maths,

Health Services

Radiologic Tech & Medical Imaging

Mechanical Engineering Technology



Depts. - who will use?

~~CS/CE/CST~~ CS/CE/CST

~~EET~~ EET ↔ TELCOM

CTTE MET

COMD

People - who will contribute

Acquaviva (PHY) Morantz (EET)

Dixon (BUS) Jordan

Oudjehane (CST) Seto (BIO)

Zhang (MECH) Shields (CONSTR)

Gailani (MECH) Gilliam

Ellis → Sutton

# **JPL ROVER 11/15/2018**

**15November 2018** / 1800 hours / Namm 601

Attendees: Gio Absent

## **Agenda**

1. Team ROVA presentation

## **Notes**

1. November 15 Guest List ([Attended](#))

- |      |                       |                |           |
|------|-----------------------|----------------|-----------|
| i.   | <a href="#">Zhang</a> | Jordan         | Aptekar   |
| ii.  | Mendoza               | Seto           | Kattakola |
| iii. | Sutton                | Portiz-Vasquez | Ellis     |
| iv.  | Brown                 | Hom            | Smith     |

DUE TO STORM PRESENTATION WILL BE  
RESCHEDULED

## **Action Items**

1. Revise and group edit Proposal according to Professor Zhang feedback
2. Write Self - Reflective Essay on your Journey Through the Stages of Team ROVA rough draft due 11/29/2018
3. 12/01/2018 we will be posting on JPL's site and looking for public feedback
4. Recording in Google Drive of Professor Corbett

## 5. JPL

- a. We need a JPL Liaison
- b. JPL wants updates on their website with their resources
- c. JPL virtual invite for 11/15?
- d. Link to openlab for JPL?

## 6. 11/15 Presentation

- a. Proposal - polished- 80%
- b. Drafting - 60 %
- c. Tech - 40%
  - i. **PPT - 100% (5-7 min)**
    - 1. Pitch
      - a. Intro - 1 min
    - 2. Each Team Present
      - a. Proposal
      - b. Tech
      - c. Draft
    - 3. Summary
    - 4. Feedback

## **REMINDERS**

- 1. All teams send files to Draft team to be added to Openlab
- 2. Looking for more female Advisors for Stakeholder Grid



3. Gantt Chart , updated Calendar , Stakeholder grid, and all templates from professor are all in google drive
4. **Team Name is TEAM R.O.V.A. (Running On Valuable Assets)**
5. **JPL Rovee to be renamed ????? ROVA**

- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

**Patrick Corbett is on all teams**

Wordpress Team (Drafting)      Proposal (Editors)      Tech ( L4 Template Activity)

Robert

Julissa

Je’Nai

Nancy

Jessica

Giovanni

Keyri

Jackie

Chantal

Ricardo

Check progress of each group-edit- revise for next week

Critique all work, any new ideas

**SAVE ALL VERSIONS OF YOUR WORK**

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

# Skeleton Proposal

Proposal Title

Project Rationale

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

Overview

- I need
- I want
- You get

Budget

- Cost
- Materials
- manpower

Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

Appendixes



- College Administration
- Department Faculty – Based in research, curriculum
  - Instructional Design
    - Graphics
    - Instructions
    - Technical writing
- Student Org.
- College Association (ie BMI)
- Owners of Schools
- Principals, Deans, Teachers
- Community Organization (Education Driven)
- AWS, Microsoft, Google (Cloud computing)
- Health Services
- Radiologic Technology
- Mechanical Engineering Technology
- Department of electrical telecommunication & engineering

**Professors/ Administrators**

- John Dixon – Marketing, student relations, Motivator
- Viviana Acquaviva – Machine learning (programming) physics (Astrophysics?)
- B. Oudjehane – robotics 9 master’s) Mathematics, problem solving
- A. Zhang
- Michel Hodge – VP of enrollment & student affairs

**Who will we use?**

List of departments:	•	Professor:	Department:
• CS/CE/ CST	•	Oudjehane	CST
• Physics	•	Aquaviva	Physics
• EET	•	Zhang	Mech
• CTTE	•	Dixon	Business
• Telecommunications	•	Gailani	Mechanical
• MET	•	Jeremy Soto	Biology
• Computer Engineering	•	Sutton	Dir. Of communication

**List of Professors who can contribute**

Primary Stake holders

Prof. Jordan – Hospitality management, most assessable

Prof. August

AP Brown

Holding off on Deans who are working on other projects:

David Smith

Kevin Hom



# JPL ROVER 9/27/2018

27 SEPTEMBER 2018 / 1800 hours / Namm 601

## Attendees

Missing Giovanni, Jackie

## Agenda

<u>Student</u>	<u>Task</u>	<u>Status/ TO DO</u>
Keyri	Updated weekly calendar	complete/add new adjustments/work in wordpress
Jackie	Draft Proposal	Still in progress
Ricardo	Bio/duty suggestions	Still in progress
Shantal	Find H.S link to NYCCT and connection	Still in progress 1. Cobble Hill 2. Aviation- - Jessica working on Link 3. Bridging the Gap - needs NYCCT link(prof. Email contact cc) 4. STEPS - needs NYCCT link(prof. Email contact cc)
Giovanni	L4 Template	Still in progress
Jennifer	Stakeholder Grid	complete/ add new contact
Julissa	Stakeholder Grid	complete/ add new contact
Nancy	JPL Rover Resources	completed/continue looking for more info on Rover/ write intro to resources appendix
Robert	Gen Ed	Still in progress
JeNai	Summary 9/20/2018	Still in progress/ caught up

## New Business

1. Add New Advisor from BMCC ( becomes CUNY base project)
  - Lara Kattekola\*Asst Professor Eng BMCC ( CUNY PROJECT)  
LVKattekola@gmail.com
2. Revealed Names for **Team** and **Rover**/ still open
 

<b>Mars 20/20</b>	<b>NYCTechOUT</b>	<b>Techne' Rove</b>
<b>Johnny #5</b>	<b>C' O.R.S.P.E</b>	<b>Epistime</b>
3. Wordpress on Openlab - Keyri - look through some word pressed based projects for design, theme,
4. Pana cam on ROVER ; bringing in next class w/ VR goggles

## Notes

- **Rough drafts will be used as influence for version 1.0**
- Wordpress Team
  - Professor Corbett    Je'Nai   Keyri   Nancy
- **Nov 15 Meeting Invitees**
  - Ellis
  - Smith
  - Kattekola
- If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT the cost is ..... The process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

## Action Items

1. Write rough draft proposals
2. SAVE ALL VERSIONS OF YOUR WORK
3. Meeting with Jackie to work on draft Ver 1.0 before 10/4/2018

## Next Meeting Agenda

Check progress from To Do List

Critique rough drafts



# JPL ROVER 10/25/2018

25 October 2018 / 1800 hours / Namm 601

Attendees: Gio is absent

## Agenda

<u>Team</u>	<u>Task</u>	<u>TO DO</u>
Drafting	Openlab design	Openlab page/wordpress
Proposal	Proposal development	framework/outline/content
Tech	Deliverables	Assignments/logo/uses

## Notes

1. November 15 Guest List ([confirmed](#))

- i. Zhang      [Jordan](#)      Aptekar
- ii. Mendoza      Seto      [Kattakola](#)
- iii. Sutton      Portiz-Vasquez      [Ellis](#)
- iv. Brown      Hom      [Smith](#)
- v.

2. **JPL Rovee proposed renamed as [R.O.V.A.](#) (Running On Valuable Assets)**

3. **Group Name**

4. All teams send files to Draft team to be added to Openlab

5. Looking for more female Advisors for Stakeholder Grid

6. Gantt Chart , updated Calendar , Stakeholder grid, and all templates from professor are all in google drive
- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

**Patrick Corbett is on all teams**

Wordpress Team (Drafting)

Robert

Nancy

Keyri

Proposal (Editors)

Julissa

Jessica

Jackie

Tech ( L4 Template Activity)

Je’Nai

Giovanni

Chantal

Ricardo

**Action Items**

1. PPT Template
2. 12/01/2018 we will be posting on JPL’s site and looking for public feedback
3. **JPL**
  - a. We need a JPL Liaison
  - b. JPL wants updates on their website with their resources
  - c. JPL virtual invite for 11/15?
  - d. Link to openlab for JPL?
4. **11/15 Presentation**
  - a. Proposal - polished- 80%
  - b. Drafting - 60 %

- c. Tech - 40%
  - i. **PPT - 100% (5-7 min)**
    - 1. Pitch
      - a. Intro - 1 min
    - 2. Each Team Present
      - a. Proposal
      - b. Tech
      - c. Draft
    - 3. Summary
    - 4. Feedback

### **Next Meeting Agenda**

Check progress from To Do List

Critique all work, any new ideas

### **SAVE ALL VERSIONS OF YOUR WORK**

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

Skeleton Proposal

## Proposal Title

### Project Rationale

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

### Overview

- I need
- I want
- You get

### Budget

- Cost
- Materials
- manpower

### Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

### Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

### Appendixes

# JPL ROVER 10/11/2018

11 October 2018 / 1800 hours / Namm 601

Attendees: All in Attendance

## Agenda

<u>Team</u>	<u>Task</u>	<u>TO DO</u>
Drafting	Openlab design	Openlab page/wordpress
Proposal	Proposal development	framework/outline/content
Tech	Deliverables	Assignments/logo/uses

## Notes

1. November 15 Guest List (**confirmed**)
  - a.
    - i. Zhang **Jordan** Aptekar
    - ii. Mendoza Seto Kattakola
    - iii. Sutton Portiz-Vasquez **Ellis**
    - iv. Brown Hom **Smith**
2. Rover Logo presented: adjustments to background needed
3. Demo 3 different cam as attachable options for Rover:done
4. No name chosen for group or rover yet
- 5. Openlab Page created: look for email from Drafting team**
6. Looking for more female Advisors for Stakeholder Grid

7. Gantt Chart , updated Calendar , Stakeholder grid, and all templates from professor are all in google drive

- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

**Patrick Corbett is on all teams**

Wordpress Team (Drafting)

Robert

Nancy

Keyri

Proposal (Editors)

Julissa

Jessica

Jackie

Tech ( L4 Template Activity)

Je’Nai

Giovanni

Chantal

Ricardo

**Action Items**

1. Everyone must write a brief feedback summary on Openlab Design

2. **11/15 Presentation**

- a. Proposal - polished- 80%
- b. Drafting - 60 %
- c. Tech - 40%

3. **PPT - 100% (5-7 min)**

d. Pitch

e. Intro - 1 min

i. Each Team Present

1. Proposal

2. Tech

3. Draft

- f. Summary
- g. Feedback

### Next Meeting Agenda

Check progress from To Do List

Critique all work, any new ideas

### **SAVE ALL VERSIONS OF YOUR WORK**

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

### Skeleton Proposal

Proposal Title

Project Rationale

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

Overview

- I need
- I want

- You get

#### Budget

- Cost
- Materials
- manpower

#### Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

#### Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

#### Appendixes



# JPL ROVER 10/04/2018

04 October 2018 / 1800 hours / Namm 601

Attendees: Missing Chantal and Ricardo

## Agenda

<u>Student</u>	<u>Task</u>	<u>Status/ TO DO</u>
Keyri	Updated weekly calendar	complete/add new adjustments/GAntt Chart
Jackie	Draft Proposal	Teamwork 9/27/18
Ricardo	Bio/duty suggestions	Still in progress
Chantal	Find H.S link to NYCCT and connection	<p>Still in progress</p> <ol style="list-style-type: none"> <li>1. Cobble Hill</li> <li>2. Aviation- -Jessica working on Link</li> <li>3. Bridging the Gap - needs NYCCT link(prof. Email contact cc)</li> <li>4. STEPS - needs NYCCT link(prof. Email contact cc)</li> </ol>
Giovanni	L4 Template	completed
Jennifer	Stakeholder Grid	complete/ add new contact
Julissa	Stakeholder Grid	complete/ add new contact
Nancy	JPL Rover Resources	completed
Robert	Gen Ed	completed
JeNai	Summary 9/27/2018	Completed

## New Business

### 1. November 15 Guest List

a.

- |      |         |                |           |
|------|---------|----------------|-----------|
| i.   | Zhang   | Jordan         | Aptekar   |
| ii.  | Mendoza | Seto           | Kattakola |
| iii. | Sutton  | Portiz-Vasquez |           |
| iv.  | Brown   | Hom            | Smith     |

## Notes

1. We did not get to use goggles in class
  2. No name chosen for group or rover yet.
  3. Created new list for 11/15/18 invitee list (seven named people two unknown, 1 male, 1 female): professor prefers more women on board
  4. Gantt Chart , updated Calendar , Stakeholder grid are all in google drive
- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

### **Patrick Corbett is on all teams**

#### Wordpress Team (Drafting)

Robert

Nancy

Keyri

#### Proposal (Editors)

Julissa

Jessica

Jackie

#### Tech ( L4 Template Activity)

Je'Nai

Giovanni

Chantal

Ricardo

### **Action Items**

1. Create Openlab page (Nancy)
2. Write rough draft proposals / Team work
  - SAVE ALL VERSIONS OF YOUR WORK
3. Professor will try reach out to Ricardo and Chantal before next class

### **Next Meeting Agenda**

Check progress from To Do List

Critique all work, any new ideas

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

**PLEASE BE AWARE THEY WILL HAVE QUESTIONS**

**Be informed Before you Speak**

### **Skeleton Proposal**

**Proposal Title**

**Project Rationale**

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

**Overview**

- I need
- I want
- You get

## Budget

- Cost
- Materials
- manpower

## Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

## Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

## Appendixes

## **CUNY K12 Initiatives**

### **CUNY Prep**

2122 White Plains Road

718 839 8862

### **College Now**

250 Jay Street, Room M309

Brooklyn, NY 11201

Phone 718-260-5206

Fax 718-260-5503

### **CUNY Early College Initiative**

16 Court Street, 3rd Floor

Brooklyn, NY, 11201

- **Business Technology Early College High School (B-TECH)**
  - Queensborough Community College
- **Brooklyn College Academy**
  - Brooklyn College
- **City College Academy of the Arts**
  - The City College of New York
- **City Polytechnic High School of Engineering, Architecture, and Technology**
  - New York City College of Technology
- **Energy Tech High School**
  - LaGuardia Community College
- **HERO High School**
  - Hostos Community College, CUNY
- **Hostos-Lincoln Academy of Science**
  - Hostos Community College, CUNY
- **International High School at La Guardia Community College**
  - LaGuardia Community College
- **Inwood Early College for Health & Information Technologies**
  - Bronx Community College
- **Kingsborough Early College Secondary School**

## HIGH SCHOOL CONNECTIONS

- Kingsborough Community College,
- **Manhattan Hunter Science High School**
  - Hunter College
- **The Manhattan Early College School for Advertising (MECA)**
  - Borough of Manhattan Community College
- **Middle College High School at LaGuardia Community College**
  - LaGuardia Community College
- **Pathways in Technology Early College High School (P-TECH)**
  - NYC College of Technology
- **Queens School of Inquiry**
  - Queens College
- **Science, Technology and Research Early College High School**
  - Brooklyn College
- **York Early College Academy**
  - York College

Rover Minutes

All in attendance

First order

**Presentation of Work/ To Do List**

- Identify stakeholders- Julissa and Jennifer presented grid-divided list into key stakeholders and advisors, list will be updated for next week.
- Created weekly schedule - Keyri - w/deadlines/invites/writing/plans, etc. - we added more information to be updated for next week.
- Degree Programs that may support our Project - Robert - Came up with several degree programs : CS, MET, CTTE, CET - How
- Resume summaries - Ricardo- Did not receive all resumes - assignment cont, pick possible job according to resume and interest.
- Chantal - will be looking for HS connected to NYCCT and making connections
- Giovanni - will be working with the L4 template
- Ver. 0.0000001 - good start -Jackie - needs new direction, rewording
- General Ed Outcome Goals and their relations to the JPL Rover - Je’Nai - presentation on gen ed outcome goals picked a few, explained , summarized - nice job doesn't feel the goals were exactly on point did like presentation/ changed duties

## Questions

clarify correct ways to fill out daily log/slack access;weekly todo/google drive/

## ACTIONS

- Need to get info about possible stakeholder from BMCC (reminder Prof. to email his contact)
- Come up with 3 Team names / 3 ROVER names
- For Ver 1.0 Imagine You were soliciting funding from the Faculty Dept, Chair
-



# JPL ROVER 10/18/2018

18 October 2018 / 1800 hours / Namm 601

Attendees: Julissa is absent

## Agenda

<u>Team</u>	<u>Task</u>	<u>TO DO</u>
Drafting	Openlab design	Openlab page/wordpress
Proposal	Proposal development	framework/outline/content
Tech	Deliverables	Assignments/logo/uses

## Notes

1. November 15 Guest List (**confirmed**)
  - a.
    - i. Zhang **Jordan** Aptekar
    - ii. Mendoza Seto Kattakola
    - iii. Sutton Portiz-Vasquez **Ellis**
    - iv. Brown Hom **Smith**
2. Rover Logo presented: need copyright
3. No name chosen for group : ROVEE is now **ROVA**
4. All teams send files to Draft team to be added to Openlab
5. Looking for more female Advisors for Stakeholder Grid
6. Gantt Chart , updated Calendar , Stakeholder grid, and all templates from professor are all in google drive

- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

**Patrick Corbett is on all teams**

Wordpress Team (Drafting)      Proposal (Editors)      Tech ( L4 Template Activity)

Robert

Julissa

Je’Nai

Nancy

Jessica

Giovanni

Keyri

Jackie

Chantal

Ricardo

**Action Items**

**1. Find actions words for the ROVA**

2. Professor will have PPT template for us

**3. 11/15 Presentation**

- a. Proposal - polished- 80%
- b. Drafting - 60 %
- c. Tech - 40%

**3. PPT - 100% (5-7 min)**

d. Pitch

e. Intro - 1 min

i. Each Team Present

- 1. Proposal
- 2. Tech
- 3. Draft

f. Summary

## **g. Feedback**

### **Next Meeting Agenda**

Check progress from To Do List

Critique all work, any new ideas

### **SAVE ALL VERSIONS OF YOUR WORK**

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

### **Skeleton Proposal**

Proposal Title

Project Rationale

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

Overview

- I need
- I want
- You get

## Budget

- Cost
- Materials
- manpower

## Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

## Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

## Appendixes

# JPL ROVER 11/01/2018

01November 2018 / 1800 hours / Namm 601

Attendees: All

## Agenda

<u>Team</u>	<u>Task</u>	<u>TO DO</u>
Drafting	Openlab design	Openlab page/wordpress
Proposal	Proposal development	framework/outline/content
Tech	Deliverables	Assignments/logo/uses

## Notes

1. November 15 Guest List ([confirmed](#))

- i. Zhang      [Jordan](#)      Aptekar
- ii. Mendoza      Seto      [Kattakola](#)
- iii. Sutton      Portiz-Vasquez      [Ellis](#)
- iv. Brown      Hom      [Smith](#)

2. Team Name is CUNY [R.O.V.A.](#) (Running On Valuable Assets)

3. JPL Rovee to be renamed      ????? ROVA

4. All teams send files to Draft team to be added to Openlab

5. Looking for more female Advisors for Stakeholder Grid

6. Gantt Chart , updated Calendar , Stakeholder grid, and all templates from professor are all in google drive
- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

**Patrick Corbett is on all teams**

Wordpress Team (Drafting)

Robert

Nancy

Keyri

Proposal (Editors)

Julissa

Jessica

Jackie

Tech ( L4 Template Activity)

Je'Nai

Giovanni

Chantal

Ricardo

**Action Items**

1. **PPT Template /edited/revise for next week**
2. 12/01/2018 we will be posting on JPL's site and looking for public feedback
3. **JPL**
  - a. We need a JPL Liaison
  - b. JPL wants updates on their website with their resources
  - c. JPL virtual invite for 11/15?
  - d. Link to openlab for JPL?
4. **11/15 Presentation**
  - a. Proposal - polished- 80%
  - b. Drafting - 60 %

- c. Tech - 40%
  - i. **PPT - 100% (5-7 min)**
    - 1. Pitch
      - a. Intro - 1 min
    - 2. Each Team Present
      - a. Proposal
      - b. Tech
      - c. Draft
    - 3. Summary
    - 4. Feedback

### **Next Meeting Agenda**

### **Checked progress of each group-edit- revise for next week**

Check progress from To Do List

Critique all work, any new ideas

### **SAVE ALL VERSIONS OF YOUR WORK**

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

## Skeleton Proposal

### Proposal Title

### Project Rationale

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

### Overview

- I need
- I want
- You get

### Budget

- Cost
- Materials
- manpower

### Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

### Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

### Appendixes



# JPL ROVER 11/08/2018

08November 2018 / 1800 hours / Namm 601

Attendees: All

## Agenda

<u>Team</u>	<u>Task</u>	<u>TO DO</u>
Drafting	Openlab design	Openlab page/wordpress
Proposal	Proposal development	framework/outline/content
Tech	Deliverables	Assignments/logo/uses

## Notes

1. November 15 Guest List ([confirmed](#))

- i. Zhang      [Jordan](#)      Aptekar
- ii. Mendoza      Seto      [Kattakola](#)
- iii. Sutton      Portiz-Vasquez      [Ellis](#)
- iv. Brown      Hom      [Smith](#)

2. Team Name is **TEAM R.O.V.A. (Running On Valuable Assets)**

3. JPL Rovee to be renamed      ????? ROVA

4. All teams send files to Draft team to be added to Openlab

5. Looking for more female Advisors for Stakeholder Grid

6. Gantt Chart , updated Calendar , Stakeholder grid, and all templates from professor are all in google drive
- **Class divided into Groups ( duties will be interchangeable ) work on deliverables, proposal body, appendixes, Overview.**

**Patrick Corbett is on all teams**

Wordpress Team (Drafting)

Robert

Nancy

Keyri

Proposal (Editors)

Julissa

Jessica

Jackie

Tech ( L4 Template Activity)

Je'Nai

Giovanni

Chantal

Ricardo

**Action Items**

1. Next week is Presentation Time
2. PPT Template /edited/revise for next week
3. 12/01/2018 we will be posting on JPL's site and looking for public feedback
4. **JPL**
  - a. We need a JPL Liaison
  - b. JPL wants updates on their website with their resources
  - c. JPL virtual invite for 11/15?
  - d. Link to openlab for JPL?
5. **11/15 Presentation**

- a. Proposal - polished- 80%
- b. Drafting - 60 %
- c. Tech - 40%
  - i. **PPT - 100% (5-7 min)**
    - 1. Pitch
      - a. Intro - 1 min
    - 2. Each Team Present
      - a. Proposal
      - b. Tech
      - c. Draft
    - 3. Summary
    - 4. Feedback

### **Next Meeting Agenda**

### **Checked progress of each group-edit- revise for next week**

Continue to revise and group edit PPT

Check progress from To Do List

Critique all work, any new ideas

### **SAVE ALL VERSIONS OF YOUR WORK**

If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT.

the cost is ..... the process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

## Skeleton Proposal

### Proposal Title

### Project Rationale

- NYCCT Mission and Values
- Academic Momentum
- Strategic Direction

### Overview

- I need
- I want
- You get

### Budget

- Cost
- Materials
- manpower

### Deliverables

- Support materials - sample assignments , our work, openlab
- Project website link - “ How to build a Rover”
- Reports

### Outcomes

- Proposal for course diverse course integration
- Degree program integration
- Club participation

## Appendixes



# JPL ROVER 9/27/2018

27 SEPTEMBER 2018 / 1800 hours / Namm 601

## Attendees

Missing Giovanni, Jackie

## Agenda

<u>Student</u>	<u>Task</u>	<u>Status/ TO DO</u>
Keyri	Updated weekly calendar	complete/add new adjustments/work in wordpress
Jackie	Draft Proposal	Still in progress
Ricardo	Bio/duty suggestions	Still in progress
Shantal	Find H.S link to NYCCT and connection	Still in progress 1. Cobble Hill 2. Aviation- - Jessica working on Link 3. Bridging the Gap - needs NYCCT link(prof. Email contact cc) 4. STEPS - needs NYCCT link(prof. Email contact cc)
Giovanni	L4 Template	Still in progress
Jennifer	Stakeholder Grid	complete/ add new contact
Julissa	Stakeholder Grid	complete/ add new contact
Nancy	JPL Rover Resources	completed/continue looking for more info on Rover/ write intro to resources appendix
Robert	Gen Ed	Still in progress
JeNai	Summary 9/20/2018	Still in progress/ caught up

## New Business

1. Add New Advisor from BMCC ( becomes CUNY base project)
  - Lara Kattokola\*Asst Professor Eng BMCC ( CUNY PROJECT)  
LVKattokola@gmail.com
2. Revealed Names for **Team** and **Rover**/ still open
 

<b>Mars 20/20</b>	<b>NYCTechOUT</b>	<b>Techne' Rove</b>
<b>Johnny #5</b>	<b>C' O.R.S.P.E</b>	<b>Epistime</b>
3. Wordpress on Openlab - Keyri - look through some word pressed based projects for design, theme,
4. Pana cam on ROVER ; bringing in next class w/ VR goggles

## Notes

- **Rough drafts will be used as influence for version 1.0**
- Wordpress Team
  - Professor Corbett
  - Je'Nai
  - Keyri
  - Nancy
- **Nov 15 Meeting Invitees**
  - Ellis
  - Smith
  - Kattokola
- If you are looking to ask for funding outside here is an example of what you might say:

Hello, I am working on a class project where we are looking to write a funding grant to bring the JPL Open Source Rover to NYCCT the cost is ..... The process will take.....

PLEASE BE AWARE THEY WILL HAVE QUESTIONS

Be informed Before you Speak

## Action Items

1. Write rough draft proposals

- SAVE ALL VERSIONS OF YOUR WORK
- 2. Meeting with Jackie to work on draft Ver 1.0 before 10/4/2018

## Next Meeting Agenda

Check progress from To Do List

Critique rough drafts





Running

On

Valuable

Assets



## **Creating Diversity Education Experiences through Live Virtual Reality Programming**

Patrick Corbett, PhD, Assistant Professor of English  
New York City College of Technology  
Namm Building #520, 300 Jay St., Brooklyn, NY 11201  
608-213-4384 (mobile); [pcorbett@citytech.cuny.edu](mailto:pcorbett@citytech.cuny.edu)

### **Amount Requested:**

\$4700

### **Project Purpose:**

To produce three diversity-themed *City Tech: Live-from-Taipei* virtual reality experiences for City Tech students and faculty in October, 2017. These experiences will be live-streamed using an immersive video camera, and followed by in-person, hands-on workshops where students use consumer-grade immersive video cameras to produce their own class project. The culminating experience will be a diversity-in-virtual-reality colloquium held in April, 2018 at the New York City College of Technology featuring Taipei footage, students' virtual projects, and shared experiences of participants.

### **Projected Outcomes:**

1. Three live-streamed "virtual reality" events from Taipei, Taiwan attended by City Tech faculty collaborators and their students. Each event will be advertised and open to the College community.
2. A series of four follow-up workshops, where participants learn how the project was developed and propose a prototype class project of their own (executed with their professors using consumer grade cameras).
3. An April, 2018, live-streamed college-wide colloquium combining discussions, written reflections, and virtual projects for all project participants to come together and share their work and their experiences with the College community.
4. A precedent argument for making diversity and open access a core component of future virtual reality learning experiences at City Tech, and published digitally as a case study in a technical communications journal.

## Rationale:

I am asking for support to develop three *City Tech: Live-in-Taipei* virtual reality experiences for the City Tech academic community. These will be produced during an already planned and separately funded research trip to Taipei, Taiwan in October, 2017. As a rapidly diversifying city, Taipei struggles with social and cultural dynamics that are instructive to students who study similar dynamics in New York City. Using live-streamed virtual reality, City Tech students would have a unique opportunity to “step” into the streets of Taipei with me and English-speaking local experts as we provide three virtual seminar experiences on location in an international metropolis known for its increasingly progressive stance on cultural and social diversity issues.

*City Tech: Live-in-Taipei* represents a dramatic development in the use of state-of-the-art technology for teaching at CUNY’s college of technology. Virtual reality is the next major consumer medium, and is beginning to show up in technology-leading classrooms. This project gives City Tech students not only a sense of what this technology is capable of, but doing so in a way that speaks directly to their needs as a learning population. Funding for this project will ensure that as virtual reality learning experiences continue to be integrated into City Tech’s curricula, the capacity to align them with diversity and open access goals remain a cornerstone of future projects.

## Project Description:

City Tech students and faculty will be on each tour using their smart phones and plastic frames (necessary for the full stereoscopic (i.e., “virtual reality” effect). They will see and hear everything as it occurs in ultra-high definition, live, 360-degree video. Using social media, City Tech participants will be able to interact synchronously with the Taiwanese experts, most whom speak fluent English (an experienced translator is part of the project). The following events are being planned for *Live* broadcasts:

1. An LGBTQ-themed walking tour of Taipei guided by a local expert who will discuss how Taiwan leads Asia in support of legalizing gay marriage. This tour will be a collaboration with faculty and students in health and human services.
2. An interview with a Taiwanese professional dancer and adventure travel TV host who has been blind since childhood about the challenges of working on a location-based production (several English-subtitled episodes of his show are available as well). This tour will be a collaboration with the entertainment technology program.
3. A tour of a large Taipei night market led by the host of a Taiwanese food culture program that discusses the rich diversity of histories, cultures, and cuisines that make the night markets an iconic symbol of Taiwanese society. This tour will be a collaboration with the hospitality management program.



@seriouschangethroughplay



<https://openlab.citytech.cuny.edu/seriouschangethroughplay/>



seriouschangethroughplay@gmail.com

[CC-BY-SA 4.0] Brooklyn, New York, 2016

## Implementation:

*City Tech: Live-in-Taipei* arrangements are sponsored by Andrew Ryan, an internationally award-winning journalist known in Taiwan as the host of two public television shows dedicated to expanding the acceptance of diversity in Taiwanese society. Mr. Ryan's 20-years of experience in media journalism brings deep access to Taiwanese organizations whose missions enhance diversity and opportunity in Taiwanese society. When not on location, he is a radio host, frequently university lecturer, and commentator on Taiwanese culture.

The technical delivery of *City Tech: Live-in-Taipei* events are being developed in consultation with three experienced media technologists, Prof. David Smith, Prof. Kevin Patton, and Prof. Jason Ellis. *Live* events will not only align directly with disciplinary faculty collaborators' course goals and outcomes for diversity, but also with City Tech's general education curricula, specifically community/civic engagement and global/multicultural orientation. Faculty collaborators will have the option of integrating *Live* events directly into their classes or using it as co-curricular support.

This project is a continuation of a separately proposed PSC-CUNY TRAD B interdisciplinary grant to travel to Taipei, Taiwan in October, 2017 to collect research data on the delivery of a series of workshops of my own design. These workshops use LEGO® SERIOUS PLAY® tools and methods to conduct cross-cultural communications training and education in international institutional settings. The workshops will be delivered by research partners at the Fulbright Foundation and five other Taiwanese institutes and organizations, all of whom are interested in the "communications diversity" and LEGO® research developed by Prof. Jason Ellis and myself.

This project enjoys enthusiastic support of interdisciplinary stakeholders at City Tech, the Graduate Center for Digital Initiatives, and among our Taiwanese hosts. The complex mechanism for consenting participants in Taiwan has been discussed with the College IRB director and falls directly within my own experience of conducting human subjects research in technically challenging environments and experimenting with learning media.

## Budget:

*City Tech: Live-in-Taipei* is supported by existing funding from four sources, including two PSC-CUNY grants, City Tech OTPS funds, and a Lorraine Beitler grant from the City Tech Foundation. Travel funds for the cross-cultural communications research project have been applied for through a PSC-CUNY TRAD B, Cycle 48 grant. This proposal is strictly for funds that will directly benefit City Tech student and faculty participants through the *Live* events, workshops, and colloquium.



@seriouschangethroughplay



<https://openlab.citytech.cuny.edu/seriouschangethroughplay/>



seriouschangethroughplay@gmail.com

[CC-BY-SA 4.0] Brooklyn, New York, 2016

	Cost	Qty.	Total
Reusable plastic frames to hold smartphones while streaming virtual reality content.	\$16	50	\$800
Stipends for three student assistants to help coordinate City Tech events.	\$500	3	\$1500
Collapsible printed vinyl banners (visual branding)	\$175	2	\$350
Button pins to promote <i>Live</i> events (600 units)	\$175	1	\$175
Poster-sized <i>Live</i> events advertisements (with schedule) for distribution and posting (1000 units)	\$475	1	\$475
Permissible expenses (e.g., reproduction) that support faculty collaborators' <i>Live</i> classroom work.	\$400	1	\$400
Consumer-grade live-streaming VR cameras for faculty and student group use.	\$350	3	\$1050
			\$4750



Introducing

# Techné Rovee



## NYCTechO.U.T Team

09.27.2018

CUNY New York City College of Technology

300 Jay Street

Brooklyn, New York , 11212

# NYCTechOUT Team

## Overview

- NASA Jet Propulsion Laboratory's Mars rover, designed at JPL by a very small team: just two student interns and a JPL project lead, plus a bunch of help from experienced JPL robotics engineers. The Open Source Rover was loosely based on a JPL educational outreach rover called ROV-E (Remotely operated vehicle for education) which went to museums, schools, and events to get people excited about robotics and space exploration.

## Goals

- This rover is meant to help teach a number of the critical aspects of robotics: mechanical engineering, CAD/fabrication, electrical engineering, and software development. This combination may look intimidating, but many existing robotics projects may not give as much experience across all of these areas. We hope that by releasing the plans for this rover we inspire the next generation of engineers, roboticists, and scientists to get involved by building their own mini Mars rover

## Specifications

- Budget
  - Total cost of less than \$2,500
    - Breakdown
- Scheduling

# NYCTechOUT Team

- Material

- PVC pipe
- 3D printed joints
- Rocker-bogie suspension system similar to that on all Mars rovers
- 6-wheel drive and corner steering similar to that on all Mars rovers
- Composed of entirely consumer off-the-shelf parts or 3D-printed components

## Milestones

- Future Plans

- To be adopted throughout the CUNY system as an Educational learning instrument that can bring together diverse program studies and students within the community High School,s and Colleges and local communities.



Nancy Cruz  
ENG 1133  
09/27/2018  
Proposal Sample

Name of Project  
Name of student(s)  
Professor's name  
New York City College of Technology, CUNY  
300 Jay Street  
Brooklyn, N.Y 11201

Design

The proposal can be written using the font Times New Roman with a font size of 11pt and the headings can be bolded with a font size of 12 or 13pt.

### **Project Purpose**

- A brief description of the project
- What the project is and what we are doing
- What is the purpose of doing the project?

### **Outcome**

- What will the outcome be?
- What are the goals?
- What do we want to achieve?

### **Amount needed for the project**

\$\$\$\$\$

### **Budget**

A breakdown of how the money will be spent and in what the money will be spent on. We can provide a table to have a visualization of it.

### **Scheduling**

We can provide a timeline or chart of the work that we did over the semester.

### **Future**

- What are our future goals with the project?

# CUNY Open Source DIY Rover Project

Bringing JPL Educational Technology to the CUNY Community



NYC College of Technology  
City University of New York  
300 Jay Street, Brooklyn, NY 11201

## Overview

In August 2018, NASA's Jet Propulsion Laboratory (JPL) released an open source educational prototype (a.k.a. "Rovee") of the Mars Exploration Program Rovers. Rovee was engineered to be built with off-the-shelf parts and uses the affordable Raspberry Pi computer as its CPU. JPL also provides a robust set of instructions and tutorials in an open digital forum that clearly documents the building and tuning of Rovee, which is engineered with a similar suspension system as the rovers currently deployed on Mars. If funded at City Tech, Rovee will give our students an exceptional and low-cost opportunity for hands-on, collaborative learning. Under faculty supervision, participating students across multiple departments and disciplines would build, test, tune, and operate the College's own Rovee as a mobile testing and instrumentation platform.

## Resources Requested

\$3,500

## Project Rationale

Rovee provides our campus academic community with a faculty-supervised, robotic building project for students that is aligned to the College's mission and education objectives. Rovee would provide students with the opportunity to apply disciplinary expertise relevant to their majors and future careers in a supported, hands-on environment where they will work on a complex, but accessible, robotics project.

This project will leverage the many valuable resources City Tech has to offer its students, including faculty with appropriate expertise, specialized technology labs, and engaged peers with complementary technical skill sets. The flexibility of this project allows implementation in a classroom setting as part of program curriculum, as an extracurricular club/team project that fosters the interdisciplinary work that City Tech prides itself on, or a combination of both.

Building Rovee will use City Tech's water jet cutting, fabrication, and modeling capabilities, as well as the mechatronics lab. Rovee would allow faculty to provide an innovative learning community experience, especially among advanced students in the programs. By working on an open source project, City Tech students will have an opportunity to contribute their own work to the existing documentation for Rovee.

## Outcomes

Incorporating this interdisciplinary project into City Tech's curriculum will align with the institution's educational goals as they are designed within an urban, opportunity granting educational environment to serve a student body marked by linguistic, economic, and ethnic diversity. Specifically, the Rovee project will focus on the following goals:

1. Students will engage in a focused, in-depth program of study that drives their curiosity and broadens their knowledge within their major and across the disciplines.

**Knowledge:** *"Develop knowledge from a range of disciplinary perspectives and develop the ability to deepen and continue learning."*

2. Students will acquire skills needed to succeed in their education goals as well as everyday life. This project promotes productivity, analytical thinking, teamwork, and communication towards a tangible outcome.

**Skills:** *"Acquire and use the tools needed for communication, inquiry, analysis and productive work."*

3. A wide range of disciplines can participate in this project. This includes students majoring in Career and Technology Teacher Education, Computer Science, Computer Systems Technology, Electrical Engineering Technology, Mechanical Engineering Technology, Physics, Telecommunication Engineering Technology. Every student will have a unique skill set to offer the project.

**Integration:** *"Work productively within and across disciplines."*

4. This project promotes personal responsibility while building consensus within a team environment. Students will work with diverse teams and communicate in a way that promotes respect and communication.

**Values, Ethics and Relationships:** *"Understand and apply values, ethics and diverse perspectives in personal, professional, civic and cultural/global domains."*

## Deliverables

As a multi-disciplinary student project, Rovee will accomplish the following:

1. **The "Rovee" Rover**

- a. The project will produce a completed DIY Robot Rover constructed from commercially sourced and student-fabricated materials.
- b. When completed, Rovee will give City Tech students the opportunity to collaborate with professors on projects that use the rover as a testing and instrumentation platform.

2. **Educational Support Materials**

- a. The Rovee project will produce curricular assignments and co-curricular projects that will be collected as part of the L4 Living Lab assignment repository (sample assignments provided).  
Rovee can be used as a demonstration platform both within the College and the larger CUNY and MetroTech communities. .

### 3. Dedicated Project Website

- a. Landing page for City Tech's rover project, resources for collaboration and networking.
- b. OpenLab website will include the documentation and information of the project.
  - How students work together to create the Rovee as well as the departments in City Tech that assist in completing this project.
- c. Instructional videos of City Tech students and professors would be readily available for other CUNY colleges to create the Rovee.

### Budget & Resources

Items	Cost
Parts ( <i>breakdown provided in appendices</i> )	\$2,500.00
Storage and Travel Case	\$600.00
Branding and Promotional Materials	\$400.00
Assembly	300-500 hours <sup>1</sup>
<b>Total</b>	<b>\$3,500.00</b>

<sup>1</sup>) Based on average of at least 15 students contributing 1.5 hours a week over 12 weeks

### Future Goals

Maintaining the goal of bringing JPL Educational Technology to larger CUNY Community, this proposal will be shared as an open source document for funding requisitions. Adaptation for collaboration with High Schools who will benefit from this kind of project can also be explored. This project could implement a bridge program for eligible high school seniors to experience a college level program that will motivate them to continue their educational career at City Tech. Students will have the opportunity to gather knowledge and gain confidence to foster their greatest potentials.

### Appendices

**Important General Education Learning Goals—adopted by College Council March 2013**

**New York City College of Technology aspires to be a living laboratory where General Education**

- is represented by a mutually accepted core of knowledge, skills, and values that permeate all courses, not only in the liberal arts and sciences, but across the majors.
- makes rich use of the physical, historical, economic, and cultural aspects of our location in a diverse urban community
- stresses active learning and creative problem solving
- encourages engagement in personal, professional, and civic communities
- integrates theory/ knowledge and hands- on/ application
- maintains a global focus/ perspective
- is communications intensive

<p><b>KNOWLEDGE</b>  <b>Develop knowledge from a range of disciplinary perspectives, and develop the ability to deepen and continue learning.</b></p>	<p><b>Breadth of knowledge</b></p> <ul style="list-style-type: none"> <li>▪ Value knowledge and learning</li> <li>▪ Understand and appreciate the range of academic disciplines and their relationship to the fields of professional and applied study.</li> <li>▪ Use the arts, sciences and humanities as a forum for the study of values, ethical principles, and the physical world.</li> </ul>
	<p><b>Depth of knowledge</b></p> <ul style="list-style-type: none"> <li>▪ Engage in an in-depth, focused, and sustained program of study</li> <li>▪ Pursue disciplined, Inquiry-based learning in the major.</li> </ul>
	<p><b>Lifelong learning</b></p> <ul style="list-style-type: none"> <li>• Show curiosity and the desire to learn.</li> <li>• Acquire tools for lifelong learning—how to learn, how they learn, knowledge of resources.</li> </ul>
<p><b>SKILLS</b>  <b>Acquire and use the tools needed for communication, inquiry, analysis, and productive work.</b></p>	<p><b>Communication</b></p> <ul style="list-style-type: none"> <li>• Communicate in diverse settings and groups, using written (both reading and writing), oral (both speaking and listening), and visual means, and in more than one language.</li> </ul>
	<p><b>Inquiry/ Analysis</b></p> <ul style="list-style-type: none"> <li>• Derive meaning from experience, as well as gather information from observation.</li> <li>• Understand and employ both quantitative and qualitative analysis to describe and solve problems, both independently and cooperatively.</li> <li>• Employ scientific reasoning and logical thinking.</li> <li>• Use creativity to solve problems.</li> </ul> <p style="text-align: right;">→</p>

<p><b>INTEGRATION</b>  <b>Work productively within and across disciplines.</b></p>	<p><b>Information Literacies</b></p> <ul style="list-style-type: none"> <li>▪ Gather, interpret, evaluate, and apply information discerningly from a variety of sources.</li> </ul>
	<p><b>Systems</b></p> <ul style="list-style-type: none"> <li>▪ Understand and navigate systems</li> </ul>
	<p><b>Integrate Learning</b></p> <ul style="list-style-type: none"> <li>▪ Resolve difficult issues creatively by employing multiple systems and tools.</li> <li>▪ Make meaningful and multiple connections among the liberal arts and between the liberal arts and the areas of study leading to a major or profession.</li> </ul>
<p><b>VALUES, ETHICS, AND RELATIONSHIPS</b>  <b>Understand and apply values, ethics, and diverse perspectives in personal, professional, civic, and cultural/global domains.</b></p>	<p><b>Professional/Personal Development</b></p> <ul style="list-style-type: none"> <li>▪ Demonstrate Intellectual honesty and personal responsibility.</li> <li>▪ Discern consequences of decisions and actions</li> <li>▪ Demonstrate intellectual agility and the ability to manage change.</li> <li>▪ Work with teams, including those of diverse composition. Build consensus.</li> <li>▪ Respect and use creativity.</li> </ul>
	<p><b>Ethics/Values</b></p> <ul style="list-style-type: none"> <li>▪ Transform information into knowledge, and knowledge into judgment and action.</li> <li>▪ Assume responsibility for social justice</li> </ul>
	<p><b>Community/Civic Engagement</b></p> <ul style="list-style-type: none"> <li>▪ Demonstrate social and civic knowledge [regarding social, political, economic, and historical issues].</li> <li>▪ Understand organizations and histories underlying government in global context</li> <li>▪ Apply knowledge and analyze social, political, economic, and historical issues.</li> <li>▪ Show ability to contribute actively by applying knowledge to the identification and analysis of societal and professional problems to enact solutions.</li> </ul>
	<p><b>Global/ Multicultural Orientation</b></p> <ul style="list-style-type: none"> <li>▪ Demonstrate expanded cultural and global awareness and sensitivity.</li> <li>▪ Discern multiple perspectives.</li> <li>▪ Use awareness of cultural differences to bridge cultural and linguistic barriers.</li> <li>▪ Demonstrate proficiencies and capacities in dealing with a diverse society.</li> <li>▪ Communicate across cultural and linguistic barriers.</li> </ul>



## Activity Template

### Activity Title

Give your activity a name here.

### Course

Provide the course title, number, and a brief description of the course here.

### Activity Description

Provide a description of the activity in the context of how you use it.

### Learning Goals

Share the learning goals of your activity here. What objectives do you wish to achieve?



@seriouschangethroughplay



<https://openlab.citytech.cuny.edu/seriouschangethroughplay/>



seriouschangethroughplay@gmail.com

[CC-BY-SA 4.0] Brooklyn, New York, 2016

## Logistics

Describe the logistical considerations of your activity. When in the course do you do this activity? How much class time do you devote to it? How much out-of-class time does it take to prepare? What kinds of preparation (for instructor and students) is necessary? What instructions do you give students?

## Assessment

How do you assess this activity? What measures do you use? Do you include this activity in grade calculations?

## Reflection

How has this assignment impacted your teaching? What challenges did you encounter and how did you address them? What feedback did students provide? How would you imagine this activity being used in a different way?





## George Kuh's High Impact Educational Practices

- First-year seminars and experiences
- Common intellectual experiences (i.e., a core curriculum)
- Learning communities
- Writing-intensive courses
- Collaborative assignments and projects
- Undergraduate research
- Diversity and global learning ("difficult differences")
- Service- or community-based learning
- Internships
- Capstone courses and projects
- Open Digital Pedagogy (e.g., the OpenLab)
- Place-Based Learning

## Educational Goals

**KNOWLEDGE** -- Develop knowledge from a range of disciplinary perspectives, and develop the ability to deepen and continue learning.

### Breadth of knowledge

- Value knowledge and learning
- Understand and appreciate the range of academic disciplines and their relationship to the fields of professional and applied study.
- Use the arts, sciences and humanities as a forum for the study of values, ethical principles, and the physical world.

### Depth of knowledge

- Engage in an in-depth, focused, and sustained program of study
- Pursue disciplined, Inquiry-based learning in the major.

### Lifelong learning

- Show curiosity and the desire to learn.
- Acquire tools for lifelong learning—how to learn, how they learn, knowledge of resources.

**SKILLS** -- Acquire and use the tools needed for communication, inquiry, analysis, and productive work.

### Communication

- Communicate in diverse settings and groups, using written (both reading and writing), oral (both speaking and listening), and visual means, and in more than one language.

### Inquiry/ Analysis

- Derive meaning from experience, as well as gather information from observation.
- Understand and employ both quantitative and qualitative analysis to describe and solve problems, both independently and cooperatively.
- Employ scientific reasoning and logical thinking.
- Use creativity to solve problems.

**INTEGRATION** -- Work productively within and across disciplines.

### Information Literacies



@seriouschangethroughplay



<https://openlab.citytech.cuny.edu/seriouschangethroughplay/>



seriouschangethroughplay@gmail.com

[CC-BY-SA 4.0] Brooklyn, New York, 2016

- Gather, interpret, evaluate, and apply information discerningly from a variety of sources.

**Systems**

- Understand and navigate systems

**Integrate Learning**

- Resolve difficult issues creatively by employing multiple systems and tools.
- Make meaningful and multiple connections among the liberal arts and between the liberal arts and the areas of study leading to a major or profession.

**VALUES, ETHICS, AND RELATIONSHIPS** -- Understand and apply values, ethics, and diverse perspectives in personal, professional, civic, and cultural/global domains.

**Professional/Personal Development**

- Demonstrate Intellectual honesty and personal responsibility.
- Discern consequences of decisions and actions
- Demonstrate intellectual agility and the ability to manage change.
- Work with teams, including those of diverse composition. Build consensus.
- Respect and use creativity.

**Ethics/Values**

- Transform information into knowledge, and knowledge into judgment and action.
- Assume responsibility for social justice

**Community/Civic Engagement**

- Demonstrate social and civic knowledge [regarding social, political, economic, and historical issues].
- Understand organizations and histories underlying government in global context
- Apply knowledge and analyze social, political, economic, and historical issues.
- Show ability to contribute actively by applying knowledge to the identification and analysis of societal and professional problems to enact solutions.
- Demonstrate expanded cultural and global awareness and sensitivity.
- Discern multiple perspectives.
- Use awareness of cultural differences to bridge cultural and linguistic barriers.
- Demonstrate proficiencies and capacities in dealing with a diverse society.
- Communicate across cultural and linguistic barriers.

**I agree to make this assignment publically available under a Creative Commons Attribution-ShareAlike 4.0 International license (see details in the link below). I certify that I have the rights to assign a CC-BY-SA 4.0 license to this material. I understand this license is irrevocable.**



<https://creativecommons.org/licenses/by-sa/4.0/legalcode>

Name and Title	
Program/Department	
Institution	
Email	
Website/Social Media	



@seriouschangethroughplay



<https://openlab.citytech.cuny.edu/seriouschangethroughplay/>



seriouschangethroughplay@gmail.com

[CC-BY-SA 4.0] Brooklyn, New York, 2016