

## Project Team and Teamwork

*“The ability to function on (multi-disciplinary) team environment”*



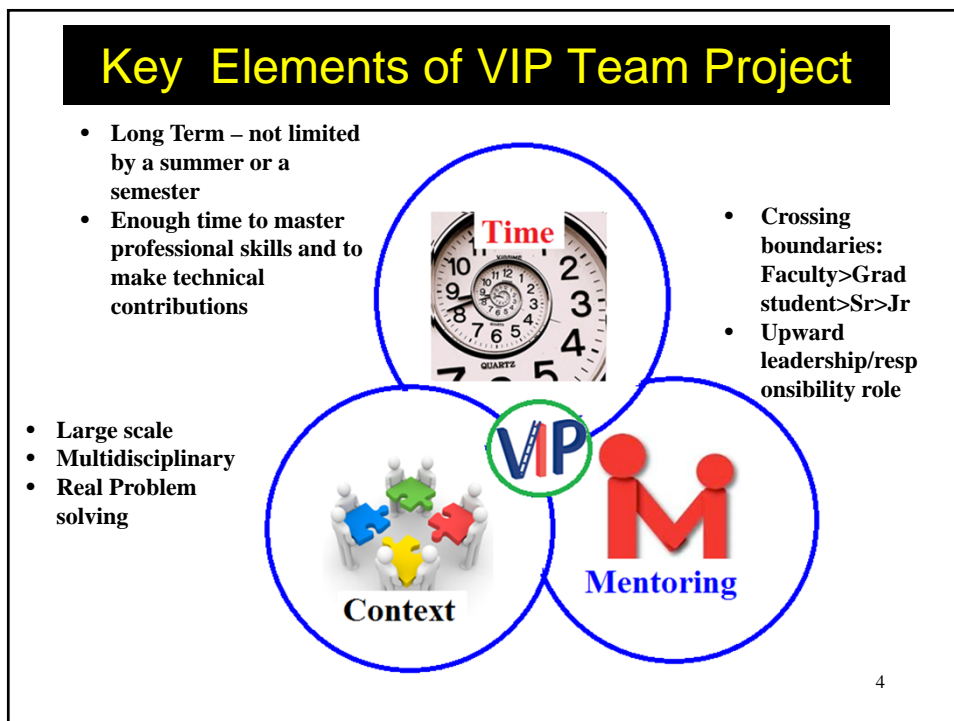
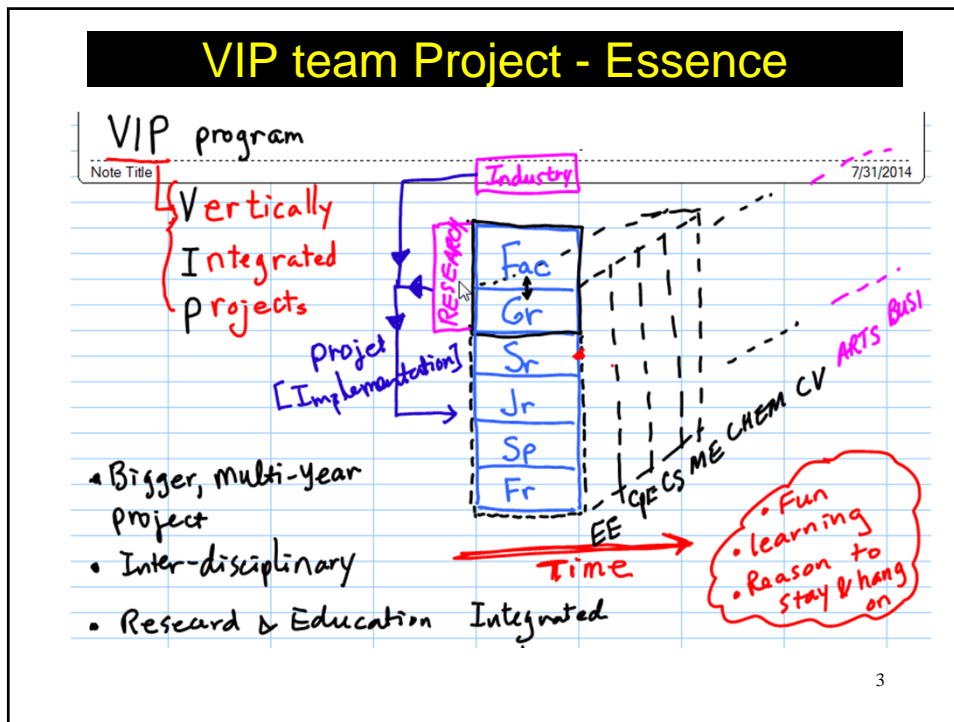
Department of Electrical Engineering and Computer Science  
Howard University

1

## Senior Design Project Teams

VIP Team	Sr1	Sr2	Sr3			
SLAM ETS#2	Witcher	Braxton				

2



## Senior Design Project in VIP Framework

- **VIP**
  - Long Term and Large Scale
  - Long-term goal(s)
  - Main vehicle for project progress: Weekly Team Meeting
- **Senior Design Project in VIP team**
  - A Small-Scale Achievable Academic Year Goal from the Long-term goals
  - Determined by the Senior Students in the team and the Academic Advisor
  - Main vehicle for project progress: **Weekly Team Meeting**

5

## 3 Important Things to do for team Project

- **1) Weekly Meetings (outside class)**
  - Tasks are defined, assigned, and checked toward the target
- **2) Project Note**
  - Weekly Team Meeting minutes/records
  - Recording of team activities
  - **Submission for Grading** --- end of the Fall 2019
  - Returned to teams in Spring 2020 for continued activity recording
- **3) Digital Project Folder**
  - Storage of all materials of team works and team submissions and presentations
  - Options:
    - Links to a digital storage space
    - 1 pdf file at the end of the semester
  - Checked for grading at the end of each semester



6

## 1<sup>st</sup> Task

- **First Team Meeting**
  - **When: Week of September 9 - 14**
  - **Tasks**
    - **Invitation of all team members**
      - Underclass students (Jr, Sp, and Fr)
      - Advisor (or project assistant)
    - **Select/Determine “small-scale 2019-2020 academic year goal” from the “long-term project goal” of the team**
    - **Completion of Team Contract**
- **Submission:**
  - A team contract for each team member
  - Due: Monday 9/23/2019

7


## Team

- **Team**
  - A special kind of group
  - Deliberately formed to commit to a purpose
  - “A team is a ( ) number of people with ( ) who are committed to a set of performance ( ), for which they hold themselves ( )” --- Katzenbach & Smith

8

**Team – Brief Summary**



- Composed of ( )
- With ( )
- Committed to ( )
- Holding each ( )



9

**More than just tasks**

- Effective Team Output:
  - “( ) productivity” & “( ) morale”
- Key to Success
  - ( ) between ( ) and ( )

10

## 1 Tasks

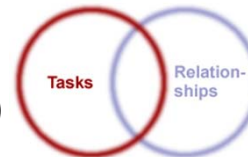
- Tasks:
  - Directed toward reaching ( )
  - Focus on ( ) and decision-making
  - Elements of effective task accomplishment
    - Seeking Information
    - Sharing Information
    - Walking the talks
    - Bringing results to meetings



11

## 2 Relationship

- Relationship:
  - Building Morale through investment in ( ) attributes of motivation, confidence, group dynamics
  - Elements of effective relationship and high team morale
    - Listening
    - Seeking agreement
    - Encouraging
    - Compromising



12

## Recap: Team

- Team is
  - **Formed** by ( ) of people
  - **Guided** by a vision and set of common ( )
  - **Functioned** by roles of members in **accomplishing** ( )
  - **Built on** ( ) among team members
  - **Run** by following **agreed-upon rules and procedures**



## Team Contract – Joining a team

- Contents of team contract:
    - Goal
    - Expectations
    - Rules and Policies
    - Commitment
- But Why?**

Any question can be directed to the VIP coordinator at [ckim@howard.edu](mailto:ckim@howard.edu). Anyone, yeah anyone, can join.

**Requirements for VIP Participants**

Requirements	Resources
1. Approval from Team Advisor (use Team Contract Form -- See the right column)	* VIP <a href="#">Team Contract Form (pdf fillable)</a> , and a <a href="#">Sample Contract</a>
2. Weekly Team Meeting Participation & Meeting Records	* VIP <a href="#">Weekly Meeting Recording Form</a>
3. Participation in Semester-End Team Presentation (last week of the semester)	* VIP Survey (See below) at the end of the semester
4. Submission of Survey (last week of each semester)	* <a href="#">Elevator Pitch</a> & How to Prepare for it?
5. Submission of 1-minute video (or audio) clip of Elevator Pitch (Last week of the semester)	* <a href="#">VIP Presentation Tips</a>

## 5 Stages of Team Development

- According to the concepts from Organizational Behavior
- 5 Stages of Team Development
  - Forming stage: teams tend to communicate in indirect polite ways rather than more directly
  - Storming stage: characterized by conflict (while can be often productive) and consume excessive amount of time and energy
  - Norming stage: teams formulate roles and standards, increasing trust and communication, reaching to “We-ness” and unity
  - Performing stage: teams achieve their goals, highly task oriented, and focus on performance and production
  - **Adjourning stage**: When the task has been completed

19

## How “Team Contract” comes in?

- **Purpose**: Acceleration of a team’s development in order to move quickly in to the performing stage.
- **Benefits**:
  - Jump-start collaborative efforts
  - Assignment of definite tasks
  - Identification of expectations
    - Level of group participation
    - Personal individual accountability
  - Establishment of team procedures
  - Specification of consequences for failing the procedures

Forming stage → Storming stage → Norming stage →  
**Performing stage** → Adjourning stage

20



## Team Contract

- Contents of team contract:
  - Goal
  - Expectations
  - Rules and Policies
  - Commitment

Any question can be directed to the VIP coordinator at [ckim@howard.edu](mailto:ckim@howard.edu). Anyone, yeah anyone, can join.

**Requirements for VIP Participants**

Requirements	Resources
1. Approval from Team Advisor (use Team Contract Form -- See the right column) 2. Weekly Team Meeting Participation & Meeting Records 3. Participation in Semester-End Team Presentation (last week of the semester) 4. Submission of Survey (last week of each semester) 5. Submission of 1-minute video (or audio) clip of Elevator Pitch (Last week of the semester)	* <a href="#">VIP Team Contract Form (pdf fillable)</a> , and a <a href="#">Sample Contract</a> * <a href="#">VIP Weekly Meeting Recording Form</a> * VIP Survey (See below) at the end of the semester * <a href="#">Elevator Pitch &amp; How to Prepare for it?</a> * <a href="#">VIP Presentation Tips</a>

## Team Contract: Goals and Expectations

- Goal Statement
  - **Long-term Goal**
  - **2019-2020 Academic Year Scope/ Goal:** for senior students
  - Clear, measurable targets that indicate progress toward the purpose (**Deliverables**)
- Expectation
  - Team's expectation on team members in
    - Meeting attendance and on-time arrival
    - Activity participation
    - Communication
    - Productivity
    - Assigned task completion
    - Keep the deadline
    - Etc

## Team Contract: Rules and Policies

- Rules and Policies
  - Running of Meetings
    - Who runs the meeting?
    - Cell-phone policy
  - How meeting absenteeism and tardiness will be handled
    - Policies for missing meeting or being late
  - Expectations of quality works
    - How to handle late and incomplete work of a member?
    - How to reward team members who exceed expected performance
  - Relationship
    - What each member to bring to each meeting
    - Developing “can do” attitude
    - etc



23

Team Contract  
Fillable Form


submit the completed form to your team advisor and keep a copy for you.

**Project Team Contract**



For Academic Year: \_\_\_\_\_

<b>Project Team Name</b>	_____		
<b>Project Team Advisor</b>	Name: _____	Discipline(Major): _____	Email: _____
<b>Project Team Graduate Assistant</b>	Name: _____	Discipline (Major): _____	Email: _____
<b>Long Term Goal of the Project</b>	_____		
<b>The Scope and Deliverables of the Academic Year</b>	Academic Year Scope Goal: _____		
	Academic Year Deliverables: _____		
<b>General Rules and Policies</b>	Each team member is required to <ul style="list-style-type: none"> <li>• Work proactively and keep the advisor and team members informed of things related to the project.</li> <li>• Be honest and open during all project activities.</li> <li>• Encourage diversity in team work.</li> <li>• Provide the opportunity for equal participation.</li> <li>• Be open to new approaches and new ideas.</li> <li>• Encourage everyone to participate in solving problems.</li> <li>• Focus on solving problems, not blaming people.</li> <li>• Only use constructive criticism.</li> <li>• Be present on time for <u>weekly meetings</u>.</li> <li>• Bring assigned works completed to the meetings.</li> <li>• Honor meeting timesframes.</li> <li>• Present ideas clearly and concisely.</li> <li>• Read communications (emails, meeting minutes, action items, etc.) from the team.</li> <li>• Respond in a timely manner.</li> <li>• Honor the team leader and follow the leader's instruction and assignment</li> </ul>		
<b>Team Specific Rules and Policies</b>	Stated by the advisor or graduate assistant: _____		
<b>Commitment by Participant</b>	I voluntarily participate in the project team with expected activities to collectively achieve the long-term goals and the academic year objectives under the guiding goals, rules, and policies as stated in this contract. I understand that I am obligated to abide by these rules and policies. I understand that if I do not abide by them, I may be requested to leave the project team.		
	Name (print) _____	Signature _____	Date _____
	Email _____	Major (EE, CpE, CS, ME, CV, CHEM, etc) _____	Level (Gr. Sr., Jr., Sp. Fr) _____
<b>Approved by the Advisor or Graduate Assistant</b>	Approver's Name (Advisor or Graduate Assistant) _____ Signature _____ Date _____		

Submit the completed form to your team advisor and keep a copy for you.

*"Sample"* **Project Team Contract** 

For Academic Year: 2018-2019

<b>Project Team Name</b>	Time to Space: Converting time-domain signal to 2D image		
<b>Project Team Advisor</b>	Name: Dr. Charles Kim	Discipline(Major): EE	Email: ckim@howard.edu
<b>Project Team Graduate Assistant</b>	Name: Demick Anang	Discipline (Major): EE	Email: demick.anang@bison.howard.edu
<b>Long Term Goal of the Project</b>	Development an electronic device which measures time domain signals and converts to a 2D image for a scientific purpose		
<b>The Scope and Deliverable of the Academic Year</b>	Academic Year Scope/Goal: single signal conversion to 2D image Academic Year Deliverables: A prototype which demonstrates the said conversion		
<b>General Rules and Policies</b>	Each team member is required to: <ul style="list-style-type: none"> <li>• Work proactively and keep the advisor and team members informed of things related to the project.</li> <li>• Be honest and open during all project activities.</li> <li>• Encourage diversity in team work.</li> <li>• Provide the opportunity for equal participation.</li> <li>• Be open to new approaches and new ideas.</li> <li>• Encourage everyone to participate in solving problems.</li> <li>• Focus on solving problems, not blaming people.</li> <li>• Only use constructive criticism.</li> <li>• Be present on time for <u>acad. meetings</u>.</li> <li>• Bring assigned works completed to the meetings.</li> <li>• Honor meeting timeframes.</li> <li>• Present ideas clearly and concisely.</li> <li>• Read communications (emails, meeting minutes, action items, etc.) from the team.</li> <li>• Respond in a timely manner.</li> <li>• Honor the team leader and follow the leader's instruction and assignment</li> </ul>		
<b>Team Specific Rules and Policies</b>	Stated by the advisor or graduate assistant: * willingness to master Android application development tools and skills		
<b>Commitment by Participant</b>	I voluntarily participate in the project team with expected activities to collectively achieve the long-term goals and the academic year objectives under the guiding goals, rules, and policies or stated in this contract. I understand that I am obligated to abide by these rules and policies. I understand that if I do not abide by them, I may be requested to leave the project team.		
	Adam Trask Name (print) adam.trask@eastofeden.com Email	 Signature CpE Major (EE, Cpl, CS, ME, CV, CHEM, etc)	9/18/2018 Date Sr Level (Gr.Sr, Jr, Sp, Fr)
<b>Approved by the Advisor or Graduate Assistant</b>	Charles Kim Approver's Name (Advisor or Graduate Assistant)  Signature 9/19/2018 Date		

## Running Effective Weekly Meetings

- Weekly Meeting
  - The main form of information exchange
  - Tasks to be identified and allocated
  - Status on assigned tasks reported
  - Assigned/completed tasks are discussed
- Meeting **Agendas** and **Minutes**
  - Without agenda, meeting is not productive
  - Agenda contents:
    - Purpose
    - Topics
    - Desired outcomes
  - **Meeting Minutes** (use the Project Note)

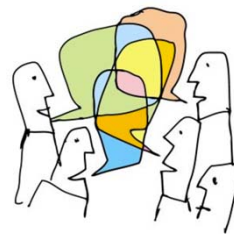
## Meeting Etiquette

- Begin the meeting **on time**
- Review the **agenda** as the first activity of the meeting
- Focus **discussion on facts** (not on personal issues) and stay on track
- Close the meeting effectively
  - **Summarize** the decisions made
  - Repeat the action items for each member
  - Set the **agenda for next meeting**

27

## Peer Evaluation – Rationale

- **What?**
  - Evaluation of each team member's strength and weakness in terms of **Tasks** and **Relationships**
- **Why ?**
  - **Teamwork & Fairness**
- **How?**
  - Each member fill out the form individually
  - Submit the form individually via **email (when required) – at the end of the semester**
  - The submitted evaluation forms and results are kept confidentially by the advisor or the instructor.
  - But will be used in grading



28

## Peer Evaluation Form

- For each item (we have 10 items) a team is given a sum of money allocated to \$500 per member.
- For each item, distribute the sum to each member according to his/her performance on the item
- The **same scores** for all members are **not accepted nor counted**.
- $P = [\text{Total Amount of Money Received}]/\$5000$

### Peer Evaluation

		Write each member's LAST name below (including yours)			
1	Works cooperatively to complete team assignments				
2	Prepares for, arrives on time, and attends meetings				
3	Makes positive contributions to meetings				
4	Work is of high quality and completed on time				
5	Brings a creative spark to the team				
6	Supports and respects other members' efforts and opinions				
7	Is able to give and receive feedback effectively				
8	Is responsible and accessible				
9	Is enthusiastic about the project and energetic				
10	Demonstrates effective leadership, keeps team focused, and elevates the work of the entire team				
<b>TOTAL</b>					29

## Summary: 1<sup>st</sup> Task

- **First Team Meeting**
  - **When: Week of September 9 - 14**
  - **Tasks**
    - **Invitation of all team members**
      - Underclass students (Jr, Sp, and Fr)
      - Advisor (or project assistant)
    - **Select/Determine “2019-2020 academic year goal” from the “long-term project goal” of the team**
    - **Completion of Team Contract**
- **Submission:**
  - Team contracts for all team members
  - **Due: Monday 9/23/2019**