Project Team and Teamwork

"The ability to function on (multi-disciplinary) team environment"

Department of Electrical Engineering and Computer Science
Howard University

1

Project

- Project Candidates
  - VIP:
    - Faculty's funded/unfunded project
    - VIP (industry sponsored/unsponsored)
  - Competition: Posted project goals (of national or international competition)
  - Student initiated: Created goals following the guideline (of industry project, competition, etc)
- Project Execution/Progress
  - Weekly **team** meetings → now we talk about team itself

2

What is team ?

- A team is a special kind of <u>group</u> deliberately formed to <u>commit to a purpose</u>
- <u>Formal Definition:</u> "A team is a (   ) number of people with (   ) skills who are committed to a common (   ) and set of performance (   ),   for which they hold themselves mutually (   )."
  --- <u>Katzenbach & Smith</u>

3

3

More than just tasks

- 2 Essential elements of a Team :
  - (   ) &
  - (   )
- Key to Success
  - (   ) between
  - (   ) and
  - (   )

4

4

1 Tasks

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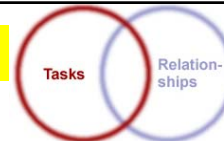   - **Bringing results to meetings**

5

5

2 Relationship

- Relationship:
  - Building Morale through investment in interpersonal attributes of (_____), (_____), and (_____)
  - Elements of effective relationship and high team morale
    - Listening
    - Seeking agreement
    - Encouraging
    - Compromising
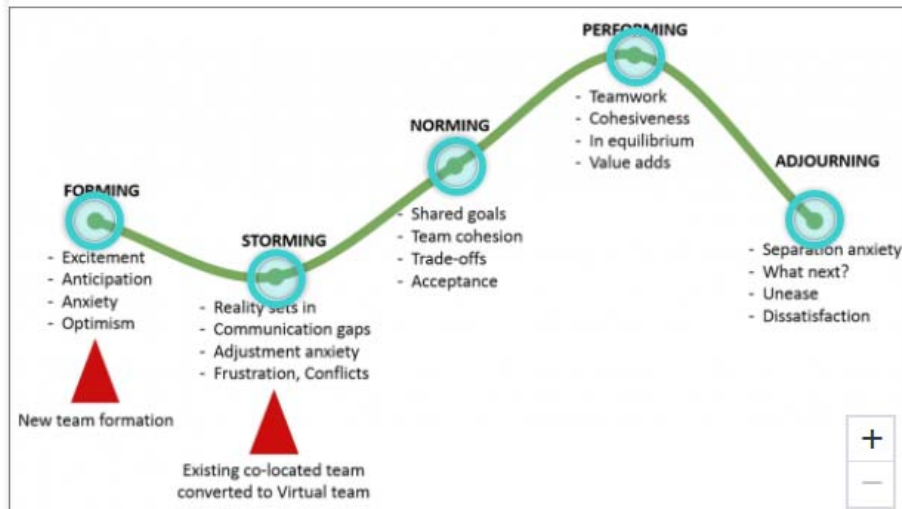
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6

5 Stages of Team Development

- According to the concepts from Organizational Behavior (*Tuckman's 5 stages*)

Recap: Team

- Team is
  - **Formed** by a (   ) number of people
  - **Guided** by a common (   ) and set of (   )
  - **Functioned** by roles of members in accomplishing (   ) while keep binding (   )
  - **Held mutual (   )**
    - **How to hold mutual (   )?**
    - **Run** by following agreed-upon <u>rules.</u>

Team Contract Contents

- **Project**
  - Project Title
  - Brief project goals/scopes
  - Final product (Deliverables)
- **Weekly Team Meetings**
  - Meeting Place
  - Meeting Time
- **Team Running Rules/Policies**
  - Meeting attendance/absence
  - Performance of assignment/task
  - Relationship building
  - Connection/communication/responses
- **Commitment**

9

9

Team Contract Contents - *Example*

- **Project**
  - Project Title   Solar Powered Autonomous mini-Car
  - Brief project goals/scopes: Design and build a solar-powered autonomous mini-vehicle for use in the upper quadrangle
  - Final product (Deliverables): A self-operating mini-vehicle with solar panel
- **Weekly Team Meetings**
  - Meeting Place: LKD2019 CEA reading room
  - Meeting Time: 5 – 7 pm
- **Team Running Rules/Policies**
  - Meeting attendance/absence: 1 absence costs 1 point in the "participation score"
  - Performance of assignment/task : a late or incomplete work costs 1 point
  - Relationship building: listening, compromising, acceptance
  - Connection/communication/responses: no response within 24 hours costs 1 point
- **Commitment**

10

10

Why "Team Contract" ?

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

11

11

Team Contract Form

Project Team Contract
For Senior Design Classes EECE401 and EECE404
Electrical Engineering and Computer Science
Howard University

Academic Semester/Year: (Fall 20___)

Project Team Name	
Project Team Members	Name1: Name2: Name3: Name4:
Project Advisor	
Project goal/scope	
Project Deliverables	
Weekly Team Meeting	Meeting Place(s): Meeting Time(s):
Project team Rules and Policies	
Commitment by Participant	By signing with my full name, I voluntarily participate in the project team with expected activities to collectively complete the project under the guiding goals, rules, and policies as stated in this contract. I understand that I am obliged to abide by these rules and policies Name:_____ Date:_____ 2022 Name:_____ Date:_____ 2022 Name:_____ Date:_____ 2022 Name:_____ Date:_____ 2022

12

12

6

Weekly Meeting

- **Weekly Meetings (outside the class)**
  - Tasks are defined, assigned, and checked toward the target
- Weekly Meeting
  - The main form of information exchange
  - Pick the best medium/platform
  - Start on time and finish on time
  - 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

13

13

Team Participation and Peer Evaluation

- **What is Peer Evaluation?**
  - Evaluation of each team member's strength and weakness in terms of Tasks and Relationships
- **Why do we do peer evaluation ?**
  - **Teamwork & Fairness**
- **How do we do it?**
  - Analogy: In a company, bonus is set for each project team with $500 per each member. At the end of the project performance evaluation, the bonus is distributed by performance basis.
  - At the end of the semester
  - Each member <u>fill</u> out the form <u>individually</u>
  - <u>Submit</u> the form <u>individually (confidential)</u>
  - The submitted evaluation forms and results <u>are kept confidentially by the instructor</u>.

14

14

Peer Evaluation Form

- For each item (we have 10 items: 5 for tasks and 5 for relationship) 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.

Peer *Average of 1 from all members* $$P = \frac{\$ \text{[Total Amount of Money Received]}}{\$ \ 5000}$$

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					
	TOTAL					

15

15

1ˢᵗ Team Work

- **First Team Meeting**
  - **When: As soon as possible but no later than (F) Sep 30**
  - **Tasks**
    - **Initiation - all team member meeting**
    - **Elect the team leader**
    - **Decide Time/Day of Weekly meeting**
    - **Completion of Team Contract**
    - **Complete the Problem Statment**
- **Submission:**
  - team contract
  - Problem Statement
  - Due: (M) Oct 3,2022

16

16