

## Project Team and Teamwork

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



Senior Design Class  
Electrical and Computer Engineering  
Department of Electrical Engineering and Computer Science  
Howard University

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## Project

- Project Candidates
  - Faculty's funded/unfunded project
    - Drs. Seabron, Lashhab, Yan, Ahmed, Tracy Adams (alumna), etc.
  - VIP (industry sponsored/unsponsored)
    - Whole or a portion of VIP project
  - **Competition**: Posted project goals (of national or international competition)
  - **Student initiated**: Created goals following the guideline (of industry project, competition, etc)
  - **Last Year's Project**
  - A project must produce a demonstrable, marketable, sellable product. If a final product is a report or just a developed concept, it is not a project.
- Project Execution/Progress
  - **Weekly team** meetings → **now we talk about team itself**

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## What is team ?

- A team is a special kind of group deliberately formed to commit to a purpose
- Formal Definition: “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 ( )”  
--- **Katzenbach & Smith**



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## More than just tasks

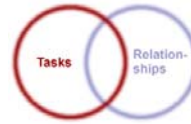
- Effective Team Output:
  - ( ) productivity &
  - ( ) morale
- Key to Success
  - ( ) between
  - ( ) and
  - ( )



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## 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**



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## 2 Relationship

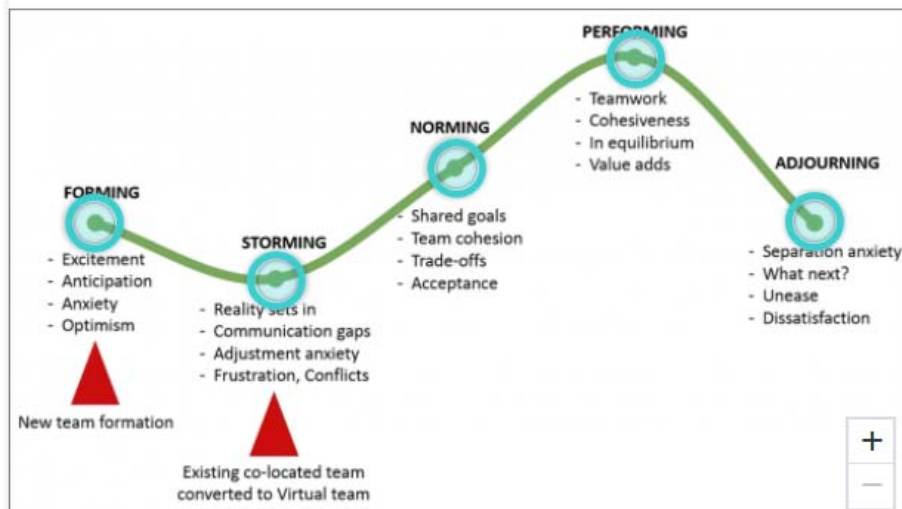
- **Relationship:**
  - Building morale through investment in Interpersonal attributes of ( ), and ( )
  - Elements of effective relationship and high team morale:
    - **Listening**
    - **Seeking agreement**
    - **Encouraging**
    - **Compromising**



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## 5 Stages of Team Development

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



<https://quizlet.com/447997477/tuckmans-5-stages-o>

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## 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 building ( )
  - **Held mutual** ( )
- **How to hold mutual ( )?**
  - Run by following agreed-upon rules → Contract



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## What and Why “Team Contract” ?

- **Purpose**: Acceleration of a team’s development toward the performing stage as quickly as possible.
- **Benefits**:
  - Relationship building
  - Jump-start collaborative efforts
  - Assignment of tasks
  - Identification of expectations for:
    - Level of group participation
    - Personal individual accountability
    - Establishment of team procedures (Rule, guideline)
    - Specification of consequences for failing the procedures

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## 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**



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## 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 Mondays
- **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**

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

**Team Contract Form**

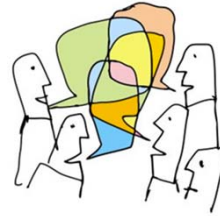
Academic Semester/Year: (Fall 20\_\_)

Project Name or Title	
Project Team Members	Name1: Name2: Name3: Name4:
Project Advisor	
Project goal/scope	
Project Deliverables	Final Product:
Weekly Team Meeting	Meeting Place(s): Meeting Time(s):
Project team Rules and Policies	1. 2. 3. 4. 5. .....
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: _____ Name: _____ Date: _____ Name: _____ Date: _____ Name: _____ Date: _____

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## 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



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## 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 \$100 per member. At the end of the project performance evaluation, the bonus is distributed by performance basis.**
  - At the end of the semester
  - Each member fill out the form individually
  - Submit the form individually (confidential)
  - The submitted evaluation forms and results are kept confidentially by the instructor.

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## 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 \$100 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 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>					

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## 1<sup>st</sup> Team Work

- **First Team Meeting**
  - **When:** As soon as possible but **no later than** \_\_\_
  - **Tasks**
    - **Initiation** - all team member meeting
    - **Elect the team leader**
    - **Decide Time/Day of Weekly meeting**
    - **Team project selection/determination**
    - **Completion of Team Contract**
- **Submission:**
  - team contract
  - Due:

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