VIP and Teamwork

Department of Electrical and Computer Engineering
Howard University

Dr. Charles Kim

www.MWFTR.com/SD.html
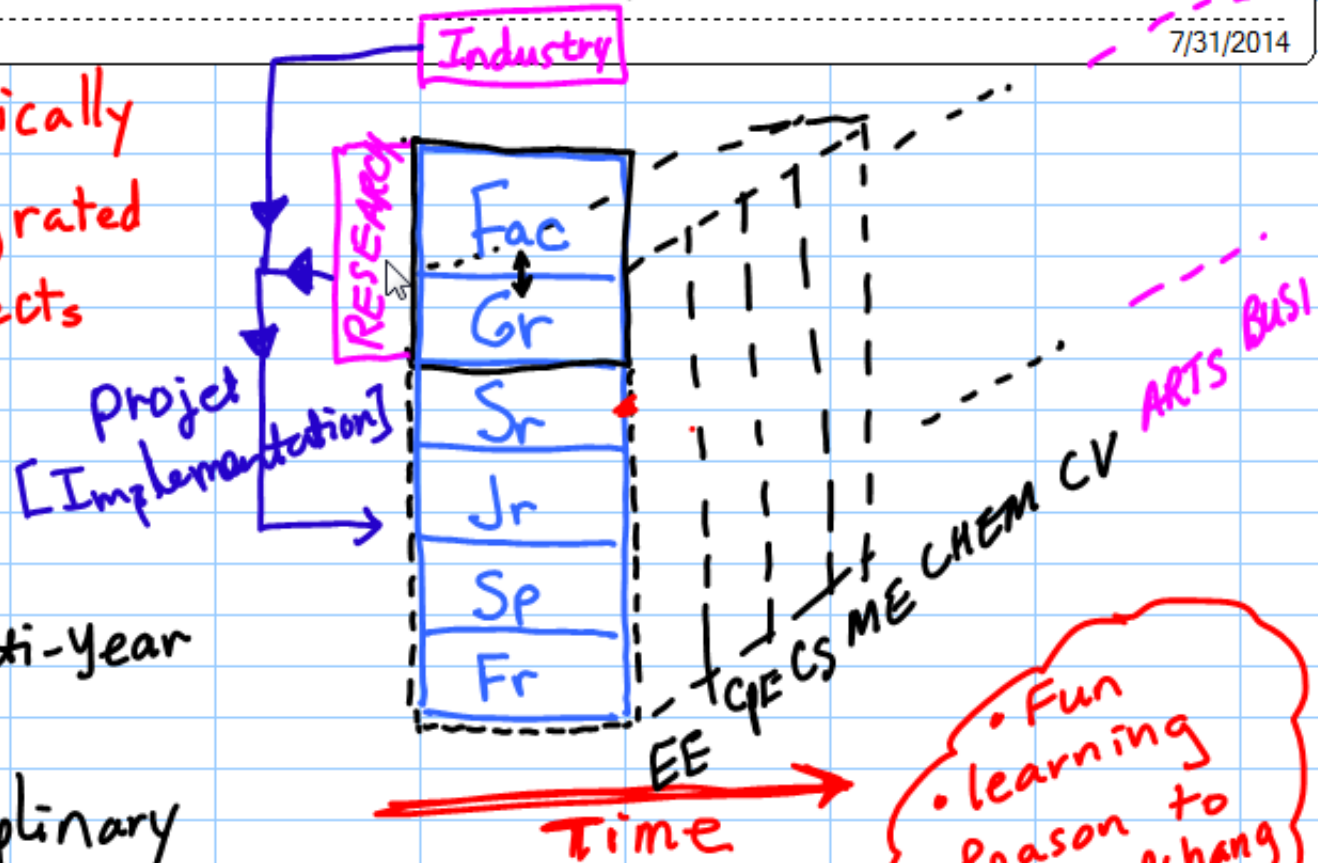
VIP Program - Essence

VIP program

Note Title   7/31/2014

Vertically
Integrated
Projects

Industry

Research

Project [Implementation]

Fac
Gr
Sr
Jr
Sp
Fr

CpE CS ME CHEM CV
EE
ARTS BUSI

Time

- Bigger, multi-year project
- Inter-disciplinary
- Research & Education Integrated

- Fun
- learning
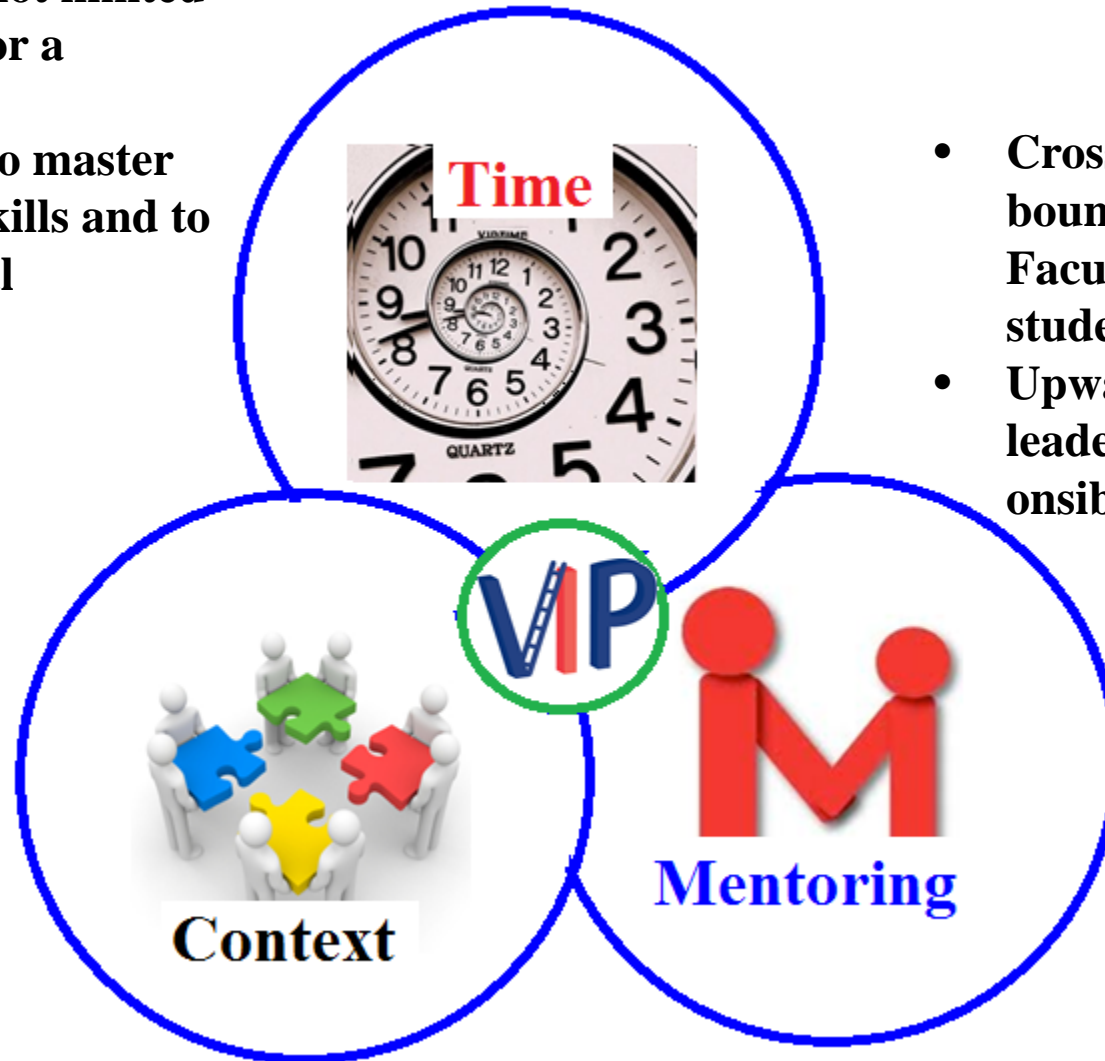- Reason to stay & hang on

Key Elements of VIP

- **Long Term – not limited by a summer or a semester**
- **Enough time to master professional skills and to make technical contributions**

- **Large scale**
- **Multidisciplinary**
- **Real Problem solving**

- **Crossing boundaries: Faculty>Grad student>Sr>Jr**
- **Upward leadership/responsibility role**

VIP Teams

- 3 Existing projects
  - Slate8
  - Intruder
  - UCC

- 4 Possible new projects
  - Ms. Inami Oakley: Golden Snitch
  - Dr. Marcus Alfred: HU Radio Telescope
  - Dr. Rubaai (with Mr. Carlton Blue): Flexible Inverter Today
  - Dr. Anderson: Prosthetic Arm: Today

- Team member Resources
  - 14 ECE Students
  - 20+ EGPP students
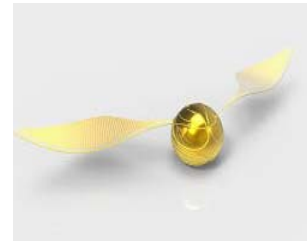 - X former team members of existing teams
  - Y new recruits

VIP Teams – Mentoring & Leadership

- Faculty Advisor
- A graduate student
- Senior Students ---
  Leadership role
- Underclass students
- Multidisciplinary

Vertical Mentoring & Leadership

Charles Kim – Howard

VIP Team Meetings and Activities

- **Weekly meeting**
  - Tasks are defined
  - Each task assigned
  - Each task performed individually or in sub-groups
- Project Note (Each participant):
  - Write every activities: search. Research, findings, designs, etc
  - Grading point --- Composition note
- Team webpage

Schedule and Tasks

- Team Formation
  - Number of ECE Senior students in a team: 2
  - Each Team will have 3 – 4 EGPP students
  - Each team recruits other students (especially <u>former underclass students</u>)
  - A faculty advisor (and a graduate student) will be introduced

- W September 16
  - Submit 3 choices

- Week of Sept 21 – 26: First Team Meeting
  - Contact former team members for info
  - Ask for project binder
  - Ask for parts, components, codes, etc

Teamwork and Leadership


- This is specifically for Senior Students

Team

- Team
  - A special kind of group
  - Deliberately formed to commit to a purpose
  - "<u>A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable</u>" --- Katzenbach & Smith
    - Small group
    - Complementary skills
    - Common Purpose
    - Mutual Accountability

More than just tasks

- **Effective Team Output:**
  - "task productivity" & "relationship morale"
- **Tasks:**
  - Directed toward reaching goals
  - Focus on problem solving and decision-making
  - Elements of effective task accomplishment
    - Seeking Information
    - Sharing Information
    - Walking the talks
    - Bringing results to meetings
- **Relationship:**
  - Building Morale through investment in interpersonal attributes of motivation, confidence, group dynamics
  - Elements of effective relationship and high team morale
    - Listening
    - Seeking agreement
    - Encouraging
    - Compromising
- **Key to Success**
  - Balance between Task and Relationship
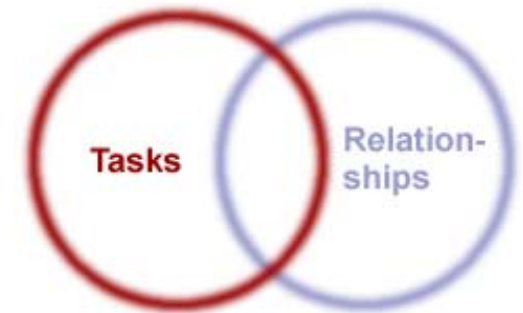
Recap: Team is

- Team is
  - **Formed** by Relationship among team members
  - **Guided** by a vision and set of common goals
  - **Functioned** by roles of members to accomplish tasks
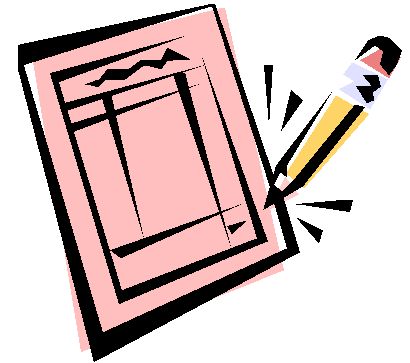 - **Run** by following agreed-upon rules and procedures

Team Contract

- Goal
- Expectations
- Rules and Policies
- Commitment

- **We will make team contracts later – after teams are formed**

Team Contract: Goals and Expectations

- ## Goal Statement
  - Clear, measurable targets that indicates progress toward the purpose

- ## Expectation Statement
  - 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 team decisions and consensus will be reached
  - How meeting absenteeism and tardiness will be handled
    - Policies for missing one meeting or being late
    - Policies for contacting someone to contact
  - 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

Running Effective Meetings

- ## Meeting
  - The main form of information exchange
  - Tasks to be identified and allocated
  - Status on assigned tasks reported

- ## Meeting Agendas and Minutes
  - Without agenda, meeting is not productive
  - Agenda contents:
    - Purpose
    - Topics
    - Desired outcomes
  - Meeting Minutes

# 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)
- Stay on track
- Close the meeting effectively
  - Summarize the decisions made and action items for each member
  - Set the agenda for next meeting
  - Evaluate how the meeting went

Peer Evaluation – Rationale

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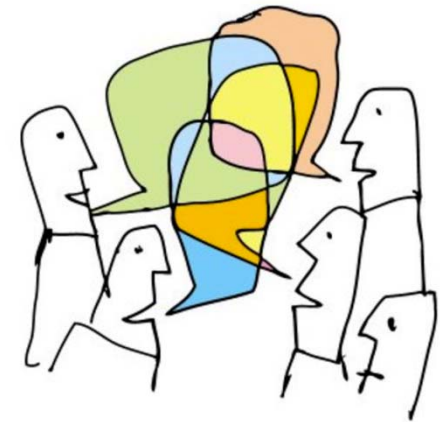
Peer Evaluation

- 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 = [Total Amount of Money]/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					
	TOTAL					18

By the way; Project Team Binder

- **Record/Keep all your works**
  - Individual works, drafts, emails,
  - Datasheets, ordering receipts, etc
  - Proposals (v1, v2, …vn)
  - Meeting Minutes
  - Presentation
  - Design Requirements
  - Anything and everything the team did and produced
- **Put them in to a Binder – chronological order**
- **Submit the binder**
- **Reminder !!!!**
  - **Individual project note**