What is this Course About

Improving the quality of life using information technology

Participants

- UMD
  - 15 registered
  - ...

- Amrita University
  - Bangalore
  - Amrita Puri
Mode of Operation

- Independent and Group activities and research
- Cooperation and Interaction
- Exchange of ideas - Forum
- Groups of 3-4 people
- Assigned work for each week
- Every week
  - One Lecture Session
  - One Discussion Session
  - Reporting on the work done in the previous week

Methodology

- Lectures
  - Focused presentation on a topic
  - Slides posted on the web
  - Annotate by adding your notes to catch the major points that may come up in discussions.
- Group Studies – Research and Exploration
  - Reports to be made in discussion session
  - Same rules of annotation apply
- Proof of Concept Demonstrations
  - Using Testbeds
    - MyeVu
    - MAXWell Net
    - ...

Grading

- Based on
  - Class participation
  - Weekly activities
  - Papers/ Projects
  - Exams
Interactions

• In Class
• Through “Forum”
• Papers
• Web postings
• Individualized
• …

Quality of Life

• What does it mean to you?

Perspective

• Individual
  — Family
  — Social Groups
  — Friends Circle
  — …

• Organization
  — International - UN
  — Corporation
  — Government
  — Non-profit
  — …
Areas

- Security
  - Public Safety – Individual
  - First Response – Incidence
  - Emergency Response – Catastrophic events
- Education
  - Elementary
  - School
  - College
  - Post Graduate and Research
- Health Care
  - Physician
  - Hospital
  - ER
  - Wellness care – health clubs – exercise
  - Food and Nutrition
- Recreation
- Social Interactions
- Transportation
- E-commerce
- Finance

Some Basic Notions

- Information
  - Fundamental Nature
  - Implications
- Interrelationships
- Context
- Models
- Limitations of Physical representations of information

Technological aspects

- Processing
- Storage
- Human Interaction
- Communications
- Inputs
  - Sensors
- Outputs
  - Actuations
  - Commands
  - Messages
**When reading a paper**

<table>
<thead>
<tr>
<th>Standard paper questions:</th>
<th>Information-Centric questions:</th>
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</thead>
<tbody>
<tr>
<td>• What is the claim of the paper?</td>
<td>• What is the purpose of the 'information' they are capturing?</td>
</tr>
<tr>
<td>• What is the key idea of the paper?</td>
<td>• What 'information' are they capturing?</td>
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<tr>
<td>• What are the strengths and weaknesses of the paper?</td>
<td>• How are they capturing the 'information'?</td>
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<td></td>
<td>• How are they storing the 'information'?</td>
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<td></td>
<td>• What 'contextual information' are they capturing?</td>
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<td></td>
<td>• Is the 'information' being captured sufficient or useful for the purpose?</td>
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<td></td>
<td>• What additional 'information' could or should be captured?</td>
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