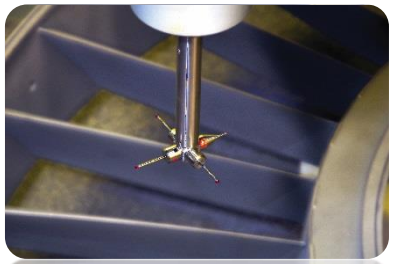

Experience with Online Classes at UNC Charlotte

Dr. Badrul Chowdhury
Professor, ECE/SEEM

UNC CHARLOTTE

Energy Production and Infrastructure Center (EPIC)

Outline

- **Online classes at UNCC**
  - What's driving it?
- **What has worked**
  - Recorded lectures
- **What hasn't quite worked perfectly**
  - Attendance; etc.
- **Unintended consequences**
  - Unbalanced syllabus
  - Tuition imbalance

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Online Programs at UNC Charlotte

- **Programs**
  - Business/Management
  - Computer Science
  - Engineering Management
- **Other**
  - Energy Concentration
  - Graduate Certificates

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My Online Classes at UNC Charlotte

- **Energy Systems**
  - Combined face-to-face and online sections
  - Combined undergraduate and graduate sections
  - Cross-listed with Systems Eng.; Eng. Mgmt; ECE

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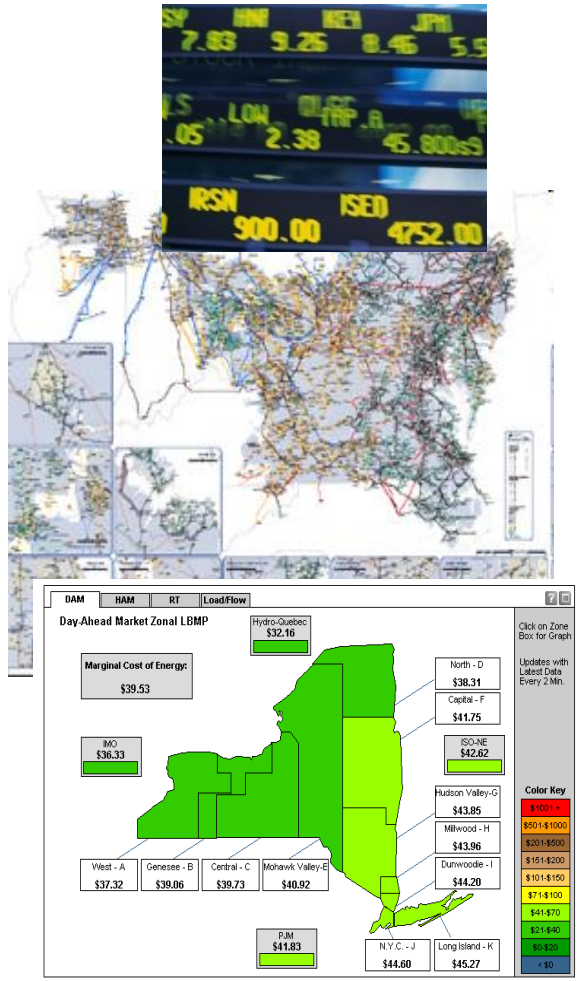
My Online Classes at UNC Charlotte

- **Energy Markets**
  - Combined face-to-face and online sections
  - Combined undergraduate and graduate sections
  - Cross-listed with Systems Eng.; Eng. Mgmt; ECE; Econ; Policy; INES



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What has Worked?

- Lectures captured on **video**
- Powerpoint lecture **slides** available to download
- Reaches students in different parts of the state/country/world
  - Kuwait, Jordan, etc.
- Online students are usually well prepared

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What doesn't always work

- **Lectures**
  - 'chained' to podium
  - 2.5 hours long!
  - Monotony!
- **Powerpoint slides**
- Writing on paper vs. lecturing with slides

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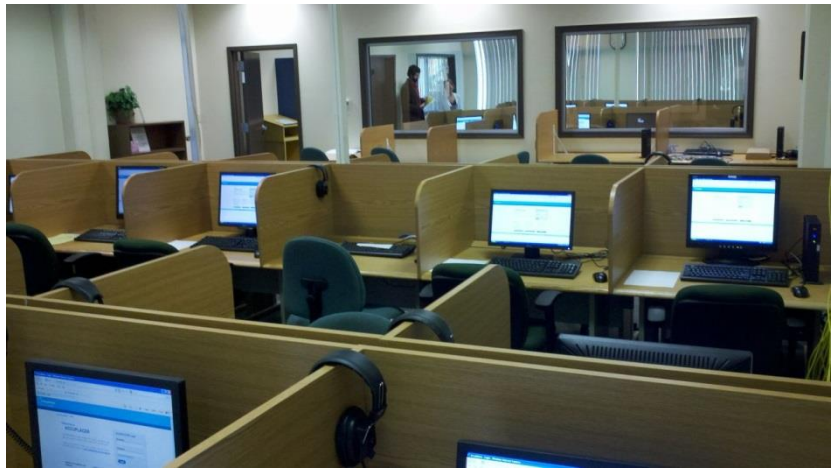
Challenges

- **Not much IT help with video production**
- **Lecture capture software**
  - Panopto: crashes, freezes,…
  - Kaltura: 45 minutes lecture segments
- **Re-record lecture if video lost**
- **Attendance in class**

Challenges

- **Exams**
  - Take home vs. timed exams
  - Proctoring for timed exams
- **Student/Faculty interaction**
- **Grading**
  - Download/upload
- **Projects and presentations**
  - Team



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Unintended Consequences

- **On-campus students take online section**
- **Long sessions**
  - Retaining attention

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