

## Suggested Topics for COE 341 Essays/Term Paper\*

There is one essay/report/presentation activity for this course to serve learning outcome number 4. Each group should consist of two or three students and shall appoint a group coordinator. Group coordinators should e-mail the instructor with the group membership and topic selections no later than Wednesday April 14<sup>th</sup>, 2010.

- Each group should collectively prepare a term paper (2000 words) on one of the topics listed below on *contemporary issues in data communications*.
- The group should submit a written report (hardcopy and e-copy) and collectively present their topic to the class as a PowerPoint presentation and entertain questions.
- The dates for submission of report and presentation will be announced in class.

### General Guidelines:

1. Must use multiple sources
2. No direct copying from sources
3. Include a brief abstract (200 words max)
4. List all references used and refer to them in the text
5. Use illustrations where required. All figures/tables should be captioned and referred to in the text.
6. For more information on technical writing, visit the COE webpage:  
[http://www.ccse.kfupm.edu.sa/coe/abet/Links\\_for\\_writing.htm](http://www.ccse.kfupm.edu.sa/coe/abet/Links_for_writing.htm)

Suggested Topics for the Term Paper:

- Wireless LANs
- Telemedicine: Societal impact of modern communications
- Analog-to-Digital Converters
- Wireless sensor networks
- The sampling theorem
- The Ethernet
- Error correction coding
- A systems view of optical fiber communications
- VoIP
- Network Security
- Routing Protocols
- Multimedia network applications
- Wireless Mobile Systems and Services (UMTS, LET, 4G proposals, Mobile WiMax, etc.)
- Digital (High) Definition Television