# Regulations and Standards applied to Design Requirement

## Design Requirements:

- (1) Specifications(2) Standards, Codes, Regulations(3) Socio-Cultural Constraints

www.mwftr.com/SD1819.html

## Regulatory Compliance – What is this?

( ): (a) an authoritative rule dealing with details or procedure; (b) a rule or order issued by an executive authority or regulatory agency of a government and having force of law



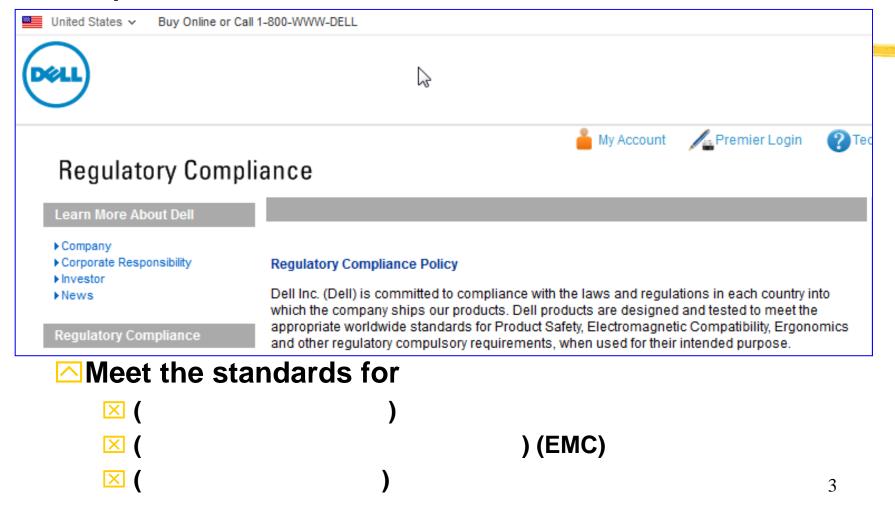
(a) the act or process of complying to a desire, demand, proposal, or regimen or to coercion; (b) conformity in fulfilling official requirements.

( ): describes their efforts to ensure that they are aware of and take steps to comply with relevant rules, standards, and regulations [\* Note: Revised/reworded from the Wikipedia description]



## Standards & Regulation

### **# Example**



### Standards & Regulation

) & ESD (

#### Electromagnetic Compatibility

Dell products are designed, tested, and classified for their intended electromagnetic environment (domestic/residential environment or business/industrial environment). Electromagnetic Compatibility (EMC) is the ability of items of electronic equipment to function properly together in the electronic environment. While all Dell computer systems have been designed and determined to be compliant with regulatory agency limits for EMC, there is no guarantee that interference will not occur in a particular installation.

Required statements for the international EMC specifications, marks and approvals, as obtained and documented on the product specific Product Safety, EMC and Environmental Datasheet, are provided in applicable agency/country language(s). Examples of EMC specifications include, but are not limited to, CISPR 22 and FCC Part 15.

#### Electrostatic Discharge

Dell products that have the CE marking are designed and tested for immunity to Electrostatic Discharge (ESD) to IEC standard 61000-4-2, CISPR 22, and CISPR 24. While these products have been designed and determined to be compliant with standard levels for ESD, there may be situations, such as low humidity levels, that can exacerbate ESD event occurrence. Users are encouraged to read and follow the ESD protection guidance provided within the Protecting Against Electrostatic Discharge section of this website.

### **#** What are these?

○ CISPR22, FCC Part 15, IEC 61000-4-2, and CISPR 24.

## Standard/Regulation

Complete Cell Phone Booster Kit

Wilson 811210 Signalboost Cellular Amplifier & portable, vented carrying case

ACIDC & DC power supplies

Got a Cell Phone Booster? FCC Says You Have To Turn It Off

- FCC says "Turn it off" why?

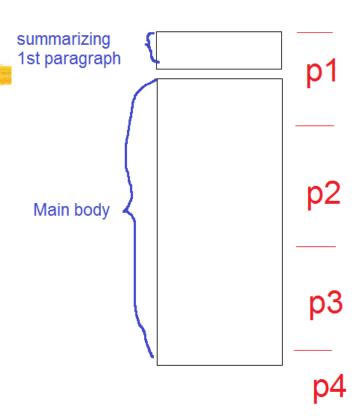
## Regulatory Compliance – Homework 1 (Individual)

- ₩Write a *technical essay* on the following subject
  - Topic: Explain (1) the regulatory codes (see the list below) and (2) what decision FCC made, on the specific Cellphone Booster, and why that kind of decision was made.
    - ∠List for part (1) of the topic:
      - CISPR22
      - FCC Part 15
      - IEC 61000-4-2, and
      - CISPR 24.

## Regulatory Compliance – Homework 1 (Individual)

- **Submission Details on HW #1:** 
  - A docx/txt file which (1) summarizes the answer to the topic in the first paragraph and (2) further details of the answer in the following paragraphs (main body).
  - ✓ Use complete sentences; **no** bullet itemization; **no** page limit; **no** images nor pictures **text only**.
  - No cover page (your name and ID in the first line)
  - □ File format: MS Word (no pdf, please)

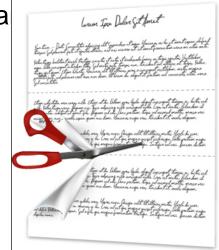
  - Due: M October 22 2018 by 1:00pm (<u>Email submission</u> to ckim@howard.edu)



## How to write well for Senior Design class

- People are more likely to read subjects/writings/emails that create curiosity or provide utility.
- ₩ When they are busy
  - Curiosity fades in importance
  - They read only the ones with practical importance ["utility"]
- So, write as if you are a staff writer (targeting for busy people) for a newspaper, and remember that you have a editor whose job is to cut your article to fit into a limited space, maybe just 1 inch in a column.
  - - Summary of the event/thing first so that it delivers message even though only that summary survives the "cutting"





## News Staff Writer Style? Compare this



www.cbsnews.com/8301-202\_162-57600384/syria-strike-seems-inevitable-as-u.n-warns-against-unilateral-military-action-hunt-l

Updated at 6:48 a.m. Eastern

**DAMASCUS, SYRIA** U.N. chemical weapons experts investigating an alleged poison gas attack near Damascus left their hotel again Wednesday hoping to carry out their second field trip, which was delayed Tuesday for security reasons.

The team of about 20 inspectors left their hotel in the Syrian capital in a convoy of cars to visit the eastern Ghouta suburbs, where the Obama administration says President Bashar Assad's forces unleashed a chemical weapons attack on Aug. 21 that killed hundreds of people.

Local opposition activists told CBS News that the convoy had reached the town of Mleiha, in the sprawling Ghouta area, and videos posted online by the activists showed the U.N. inspectors interviewing patients at clinics in Mleiha and the nearby town of Zamalka.



Play VIDEO

Intercepted communications, tissue samples prove Syrian regime responsible for gas attack



On Tuesday, Vice President Joe Biden made it clear that regardless of what the U.N. inspectors find, the White House is now convinced the attack was carried out by Assad's forces.

The American government's assessment is based on the circumstantial evidence from videos posted on the internet, and, as CBS News correspondent David Martin reported Tuesday, intelligence — much of it still classified — ranging from intercepted Syrian communications to tests of tissue samples taken from victims.

Another key piece of circumstantial evidence which has been cited by both officials and analysts for days is the simple fact that the regime is the only entity in Syria known to have chemical weapons and the means to disperse them.

## With this

By Oliver Holmes and Erika Solomon BEIRUT | Wed Aug 28, 2013 7:59am EDT

(Reuters) - The United Nations Security Council was set for a showdown over Syria on Wednesday after Britain sought authorization for Western military action that seems certain to be vetoed by Russia and probably China.

U.N. chemical weapons experts investigating an apparent gas attack that killed hundreds of civilians in rebel-held suburbs of Damascus made a second trip across the front line to take samples. Secretary-General Ban Ki-moon pleaded for them to be given the time they need to complete their mission.

But the United States and European and Middle East allies have already pinned the blame on Assad and, even without full U.N. authorization, U.S.-led air or missile strikes on Syria look all but certain, though the timing is far from clear.

That has set Western leaders on a collision course with Moscow, Assad's main arms supplier, as well as with China, which also has a veto in the Security Council and disapproves of what it sees as a push for Iraq-style "regime change" - despite U.S. denials that President Barack Obama aims to overthrow Assad.

Uncertainty over how the escalation of the conflict at the heart of the oilexporting Middle East will affect trade, and the world economy sent oil
prices, and gold, to their highest levels in months while stocks fell. Fears over the economy of
Syria's hostile neighbor Turkey pushed its lira to a record low.

#### Analysis & Opinion

Western powers could strike Syria within days

West mustn't rush into Syrian conflict

#### Related Topics

World »
Russia »
United Nations »
Syria »

#### Related Video

### U.N. resumes Syria chemical attack probe

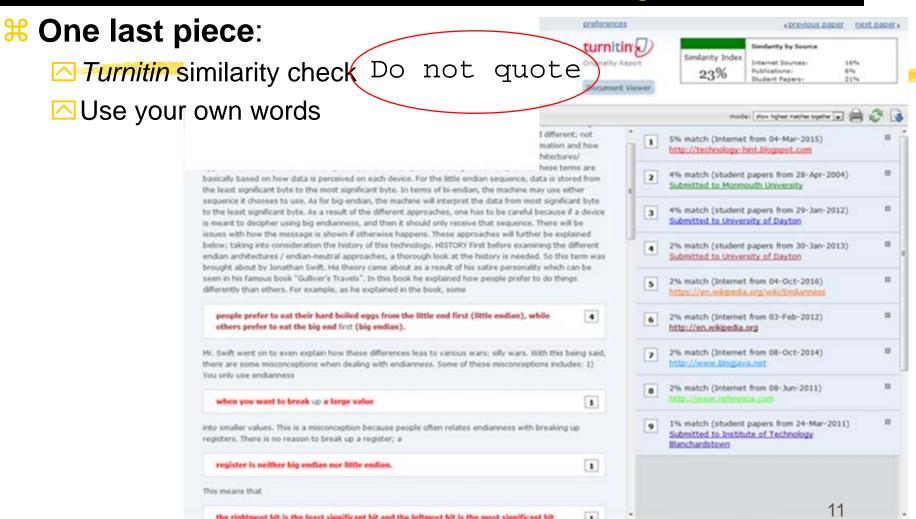
4:20am EDT

Rebels gain ground in Northern Syria

Israel will respond with force to any attack from Syria

Biden: No doubt Syrian regime used chemical weapons

## How to write well for Senior Design class



## **HW1** and Grading

- # Recap on HW1- Regulation and Regulatory Compliance
  - □ Technical writing with emphasis on "utility"
  - - □ Definitions and Usage of Codes/Regulations
    - An Analysis on an FCC's decision on a cellphone booster related with FCC code
  - Individual work with email submission due on Monday
     10/22 /2018 by 1:00pm

    - Hardcopy

### **#** Grading

- ∠ (z) Similarity Score: [0 100%]