

**Regulation and Policy in the  
Telecommunications Industry  
TM 612-WS**

**Spring 2022**

**By Dr. Raziq Yaqub**  
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Dr. Raziq Yaqub

**Lecture—00  
Introduction to Syllabus, Logistics,  
Objectives and Mutual Expectations Agreement**

**Warning**  
This Material MUST NOT BE  
Copied, Reproduced or Forwarded

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**Contents**

1. Course Overview and Course Outcomes
2. Instructor and Teaching Philosophy
3. Mutual Expectations
4. Exam Rules and Requirements
5. CRQ (Chapter Review Questions) and Attendance
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**1. Course Overview and  
Course Outcomes**

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**Course Name and Number**

- **Course Title:**
  - Regulation and Policy in the Telecommunications Industry
- **Course No.**
  - TM 612

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**Course Schedule**

- **Course Dates:-**
  - January 18, 2022 to May 06, 2022
    - First Class: Jan 24, 2022 (Monday)
    - Last Class: May, 02, 2022 (Monday)
- **Days/Time**
  - Monday
  - 06:30 pm to 09:00 pm (EST)
- **Place**
  - Live Zoom
  - <https://stevens.zoom.us/j/97869223347>

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## Course Schedule

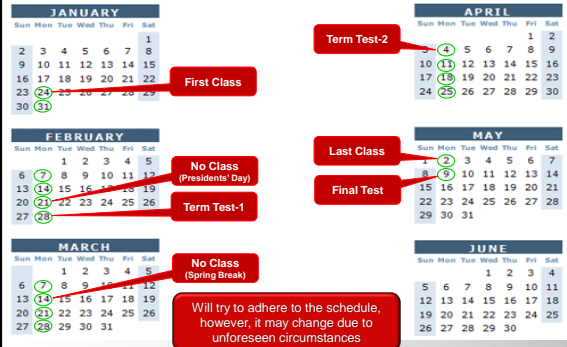
### Examinations

- Term Test-1 Includes Lecture 01 to 06 (6 Lectures)
- Term Test-2 Includes Lecture 07 to 10 (4 Lectures)
- Term Test-3 (Final Test) Includes Lecture 11 to 16 (6 Lectures)

Total Classes = 14

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## Year 2022—Proposed Test Dates (Subject to change)



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## Course Material

### Text Book

#### Digital Crossroads:

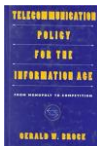
American Telecommunications Policy in the Internet Age  
(Second Edition)

By Jonathan E. Nuechterlein and Philip J. Weiser  
MIT Press, 2013  
ISBN 978-0-262519601



#### Telecommunication Policy for the Information Age: From Monopoly to Competition

By Gerald W. Brock  
Harvard University Press, 1998  
ISBN 978-0-674-87326-1



### Purchased Required?

- Students' discretion
- Not Enforced by the instructor

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## Course Scope

- Economics Principles
- Interconnection Standard
- Regulation Acts
- Wireless Communication and Regulation
- Spectrum Policy and Regulation
- Wireline Communication and Regulation
- Internet/Cyberspace and VoIP
- Cybersecurity and Regulations
- Patents and Copyright

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## Course Description

### The course plans to cover the following broad topics

- Economic Principles, and Telecommunications
- Interconnections and OSI (Open System Interconnection)
- Communication Acts
- Mobile Wireless Technologies, and Regulations
- Spectrum and Spectrum Regulations

### Term Test-1

**Note:** Term Test-1 will fall a little before the mid-term test week, therefore **Your Term Test-1 grade will be considered as midterm grade**

**Note:** I take time to review the test with the students after the test



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## Course Description

### The course plans to cover the following broad topics

- Wireline Technologies
- Wireline Technologies Regulations

### Term Test-2

**Note:** I take time to review the test with the students after the test



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## Course Description

- The course plans to cover the following broad topics
  - Internet Technologies, VoIP,
  - Cybersecurity and Regulations
  - Technical Standards, Patents and Copyrights
- Term Test-3 (Final Test)

**Note:** Based on Students' learning speed, if instructor feels the need the order and the course content may be changed/adjusted

**Note:** I review the test with the students after the test



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## Course Format

- Lectures (Mandatory)
  - Explaining Theory using power point presentation
- Chapter Review Questions (CRQ) (Mandatory)
  - 5 Multiple Choice Questions at the end of every lecture
  - More detail in the following slides
- Homework (Mandatory)
  - Turn-in within 7 days
  - By before the Class Starts
- Writing a Critique Paper (Mandatory for Master Students Only)

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## Course Format

- Extra Credit
  - Opportunity to Earn Extra Credit Based on class participation/Interaction
  - Class Participation/Interaction is Measured by
    - Attention to Lecture
    - Answering or asking oral questions (regardless it is right or wrong)
    - Volunteering

You may show attention by not using Electronic Devices during the lecture



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## Course Objectives

- To make student understand the technical concepts, such as:
  - Telecom Technologies, such as Internet, wired/wireless systems, Cybersecurity of critical infrastructure
  - US laws/policies relevant to telecommunication technologies
  - Regulatory standards bodies' involvement in telecommunications
  - Policies and analysis related to the frequency spectrum, Voice over IP (VoIP), broadband access, Intellectual Property (IP) and Patents.
- To make students capable of
  - Getting a successful career
  - Getting a leadership role
  - Contributing to the economic development

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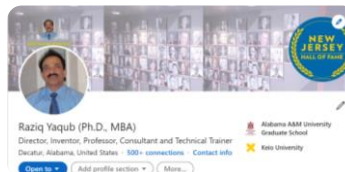
## 2. Instructor and Teaching Philosophy

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## Introduction

- Name:
  - Dr. Raziq Yaqub
  - <https://www.linkedin.com/in/dyaqub/>

Please feel free to Send LinkedIn Invite



Dr. Raziq Yaqub

## Introduction

### • Office Hours:

- Open door policy (You may walk-in)
- Also available to reach out to students
  - Over Phone 256-372-4118 (Desk), 908-319-8422 (Mobile)
  - Skype: ryaqub
  - Through e-mail ([ryaqub@stevens.edu](mailto:ryaqub@stevens.edu))
  - Through What'sApp



908-319-8422

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## My Teaching Philosophy

### My Students must:

Have a feeling of accomplishment

Must **"do extra ordinary in professional life"**

Get transformative education that must go beyond simple knowledge delivery—it must produce ethical leaders, responsible citizens, critical thinker, and virtuous human.



I want everyone get **"A" Grade**

**You can get A with that "little Extra" effort**

I am also willing to help you get A Grade

Do not hesitate **if you need EXTRA ASSISTANCE**

I will keep helping - - - - no matter what



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## My Teaching Philosophy

### • Feedback

I respect Student's feedback and opinion

Please feel free to provide your feedback

This would enable me to meet your needs

Help me to become a **GOOD TEACHER**



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## My Teaching Philosophy

### • Interactive Teaching:

- Engage the students and interact with them
- Giving Analogies and Relate the Topic with real life Applications
- Giving Extra Credit

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## 3. Mutual Expectations (Your Expectations from me and My expectations from you)

## Grades



Most Important  
thing for a Student  
is his Grade

### • Grades Re-consideration

- If you think you did not get what you deserved, **Due To Any Reason, What So Ever**, please notify me in one week from the date the Assignment/Exam is graded
- **No action will be taken if you bring it up after this time period is elapsed**
- **If you do not see your HA grades, inform me immediately via e-mail**
- You will be evaluated & graded for the chapters we cover in the class
  - Depending on the chapter length and time spent on each lecture, there is a possibility that we may not cover all Chapters

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## Cheating

- Cheating in any form will not be tolerated.
  - This includes:
    - Copying HWs,
    - Cheating on exams
    - Cheating on CRQs
- You are allowed to discuss the HW questions with your friends, and me.
  - *However, you have to write up the homework on your own.*



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## Home Assignments Submission Rules

- All Submissions
  - SHOULD BE TYPEWRITTEN
  - SHOULD BE Through BLACKBOARD
  - SHOULD BE ONCE A WEEK
  - TO BE an INDIVIDUAL EFFORT
- Please Note
  - System will **NOT ACCEPT LATE SUBMISSIONS AT ALL**
  - **If I allow to accept Late Submissions, you will lose 50% of the scope**
- Please Reproduce/Write
  - QUESTION THAT YOU ARE ANSWERING

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## Home Assignments Submission Rules

- Evidence of Cheating
  - In case I find the evidence of cheating, you will get
  - NO question asked



**NOTE: Cheating is taken VERY SERIOUSLY**

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## 4. Exams Rules and Requirements

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## EXAM Rules

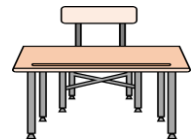
- Mid Term/Final Tests
  - Closed Book
- Cheat Sheet
  - One Cheat Sheet (A4 size) One side only, allowed
  - Cheat Sheet must contain difficult to memorize formulae, ONLY
- Partial Credit?
  - Yes, partial credit will be given if you deserve
- Makeup Exams
  - No Make-up exams (Except Extremely Unusual Circumstances)



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## EXAM Requirements

- Empty Desk
  - No Bags
  - No Cell Phone
  - No Notebook



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## EXAM Format (Sample)



### INSTRUCTIONS (Read Carefully!):



1. You will be given 70 minutes to complete the test.
2. The test is made up of three sections, A, B, and C.

**Section A** consists of 12 multiple-choice questions. You will be graded for 10 correct answers. Each correct answer carries 4 points. (Max Score 40)

**Section B** comprises 4 questions that require short answers. You will be graded for 3 correct answers. Each correct answer carries 8 points. (Max Score 24)

**Section C** consists of 4 Problems/Descriptive Questions. You will be graded for 3 correct answers. Each correct answer carries 12 points. (Max Score 36).

(TOTAL SCORE= 100 Points)

3. Please **COMPLETE** the BELOW section.

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## 5. Chapter Review Questions (CRQ) and ATTENDANCE



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### Chapter Review Questions (CRQ)

- CRQ will be presented in each class

- Each CRQ contains 5 questions
- Each correct answer carries 1 Point
- Maximum Points scored in CRQ = 5



- Scored Points will be DOUBLED

- Half the points will manifest your **Physical Presence**
- Half the points will manifest your **Mental Presence**

For Example, if your score in CRQ = 4  
Your score in CRQ will be

**4 x 2 = 8 Points**

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### Chapter Review Questions (CRQ)

- CRQ will be evaluated in the class

In case we could not reach the CRQ,  
the students who attended the class will get 20  
points in the Extra credit column



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### Chapter Review Questions (CRQ)

**CRQ is an Instrument of  
Measuring Physical and Mental Presence in Class**

- Benefits

- Students pay attention in the class
- Less absentees
- Provide guidelines for the preparation of exam
- Help me explain anything that I missed in my lecture
- Help me measure the performance of each student on a regular basis



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### Attendance

- Attendance

- The University's attendance policy will be applied
- Each attendance will carry points
- More than **Three** absences will result in loss of points.

- Makeup CRQ

- **NO MAKE-UP for CRQ** (Except Really unusual/excused circumstances)
- Three CRQs that carry least points will be dropped at the end of the semester because only 3 excusable absences allowed
- Note: 3CRQs will be dropped only for the students who make 100% attendance
- More than three absences will result in loss of points

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## Student Progress Sheet (Attendance and CRQ)

- For online classes
- The Students' Progress Sheet will be displayed on the screen
  - Extra Credit
  - CRQ Score

Student Name	Attendance	CRQ Score	Extra Credit	Total Score
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
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30				

Is there any Privacy Issue?

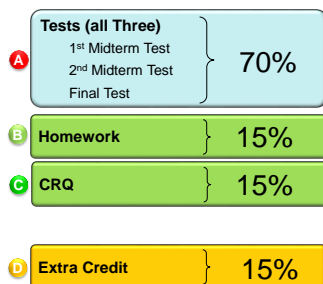
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## 6. Students' Assessment Format

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## Assessment Format

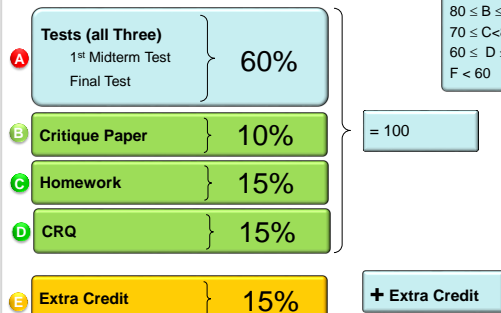
**Grading Scale**  
 A ≥ 90%  
 80 ≤ B ≤ 90  
 70 ≤ C < 80  
 60 ≤ D ≤ 70  
 F < 60



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## Assessment Format if in case of Critique Paper

**Grading Scale**  
 A ≥ 90%  
 80 ≤ B ≤ 90  
 70 ≤ C < 80  
 60 ≤ D ≤ 70  
 F < 60



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## Formula

## Example

**A** 
$$\frac{(\text{Score Earned in Test\#1} + \text{Test\#2} + \text{Test\#3}) \times 60}{300}$$

## Example

**A** 
$$\frac{(60 + 75 + 85) \times 60}{300} = 44$$

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## Formula

## Example

**B** 
$$\frac{(\text{Score Earned in Critique Paper}) \times 10}{100}$$

## Example

**B** 
$$\frac{(79) \times 10}{100} = 7.9$$

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Formula	Example
<p><b>C</b></p> $\frac{(\text{Score Earned in CRQ}) \times 15}{\text{Total Score of all (CRQ - 3) CRQs}}$	<p><b>Example:</b></p> <ul style="list-style-type: none"> <li>Assume total CRQs are 13</li> <li>3 dropped (13-3) = 10</li> <li>Total Score of 10 CRQs = 10</li> </ul>
<p><b>C</b></p> $\frac{(85) \times 15}{100} = 12.75$	

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Formula	Example
<p><b>D</b></p> $\frac{(\text{Score Earned in Home Assignments}) \times 15}{\text{Total Score of all the Home Assignments}}$	<p><b>Example:</b></p> <ul style="list-style-type: none"> <li>Assume Total HA are 13</li> <li>Total Score of 13 Home Assignments = 130</li> </ul>
<p><b>D</b></p> $\frac{(110) \times 15}{130} = 12.69$	

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Formula	Example
<p><b>Total Score</b></p> $\text{Score Earned in (A + B + C + D)}$	
<p><b>Example</b></p> $44 + 7.9 + 12.75 + 12.69 = 77.34 \quad (\text{C Grade})$	

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Formula	Example
<p><b>E</b></p> $\frac{(\text{Score Earned in Extra Credit}) \times 15}{\text{Highest Score Earned by Any Student in the Class}}$	<p><b>Example:</b></p> <ul style="list-style-type: none"> <li>Assume total extra credit earned by "A" student = 700 points</li> <li>Assume the Highest Score earned by a student "Z" = 800</li> <li>Weighted Score =</li> </ul>
<p><b>E</b></p> $\frac{(780) \times 15}{800} = 14.625$	

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Formula	Example
<p><b>Total Score with Extra Credit</b></p> $\text{Score Earned in (A + B + C + D + E)}$	
<p><b>Example</b></p> $44 + 7.9 + 12.75 + 12.69 + 14.625 = 91.96 \quad (\text{A Grade})$ <p style="text-align: right;"><b>Extra Credit</b></p>	
<p><b>If your score is 100% in A, B, C, and D</b></p> <ul style="list-style-type: none"> <li>The extra credit will not help you</li> </ul> <p><b>If your score is 75% (C-Grade) in A, B, C, and D</b></p> <ul style="list-style-type: none"> <li>The extra credit will help you get 90% i.e. A grade</li> </ul>	

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Some Worth Mentioning Policies
<p><b>Americans with Disabilities Act (ADA) Policy</b></p> <ul style="list-style-type: none"> <li>Any student who has a documented disability and is in need of academic accommodations should notify the professor of this course and contact the Office of Differing Abilities Services.</li> <li>"Americans with Disabilities Act" is available on the University website</li> </ul>
<p><b>Code of Conduct</b></p> <ul style="list-style-type: none"> <li>Please visit the following portal and observe the policy</li> </ul>
<p><b>Other Policies</b></p> <ul style="list-style-type: none"> <li>Please visit the portal for University Policies and Procedures</li> </ul>

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## 7. Practice CRQ

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## Chapter Review Questions (CRQ)

### Chapter-00

Send a **Chat Message Privately to Raziq Yaqub**  
Send me the alphabets in order corresponding to  
your answer, i.e. A, B, C, D, A



### Q1

- **Pick the most correct statement**
  - A. NO MAKE-UP for CRQ
  - B. Three CRQs that carry least points will be dropped for those students only who will make 100% attendance
  - C. More than three absences will result in loss of points
  - D. All are correct

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### Q2

- **Pick the most accurate Statement**
- **My Teaching Philosophy is**
  - A. That I want everyone to get A grade
  - B. To respect Students' feedback
  - C. To practice interactive teaching
  - D. All the statements are correct

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### Q3

- **Pick the most accurate Statement**
- **Homework Submission Rule(s) involves**
  - A. Submission should be typewritten
  - B. Assignment is Due in One Week
  - C. NO Late Submission at all
  - D. All the statements are correct

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### Q4

- **Pick the Most Correct Statement**
  - A. If you think you did not get what you deserved in assignments/Exams, DUE TO ANY REASON, WHAT SO EVER, please notify in one week from the date the assignment/Exam is graded. No action will be taken if you bring it up after this time period is elapsed
  - B. Cheating is not tolerated. This includes HWs, Exams and CRQ
  - C. Exam is Closed Book Exam, and Partial Credit will be given.
  - D. A, B and C are Correct

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### Q5

- **Pick the most correct Statement**

- A. Points Scored in each CRQ will be DOUBLED, i.e. "2X"
- B. "X" Score will manifest Physical Presence and "X" Mental Presence
- C. CRQ is MANDATORY in each class, but if we could not reach the CRQ, those who attended the whole class will get 20 points in their extra credit.
- D. All the statements are correct

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### Answers to CRQ



### Q1

- **Pick the most correct statement**

- A. NO MAKE-UP for CRQ
- B. Three CRQs that carry least points will be dropped for those students only who will make 100% attendance
- C. More than three absences will result in loss of points
- D. All are correct

D. All are correct

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### Q2

- **Pick the most accurate Statement**

- **My Teaching Philosophy is**

- A. That I want everyone to get A grade
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D. All are correct

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- C. CRQ is MANDATORY in each class, but if we could not reach the CRQ, those who attended the whole class will get 20 points in their extra credit.
- D. All the statements are correct

D. All are correct

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## 8. Volunteer Opportunity

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### VOLUNTEER OPPORTUNITY !!!

- **IF you would like to volunteer**

- You may
- Volunteering is out of the goodness of your heart

- **Requirements**

- Volunteer must have A grade in previous semesters
- Volunteer must maintain A grade in term tests
- (This is to motivate the students to get A grade)



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### VOLUNTEER OPPORTUNITY !!!

- **Responsibilities**

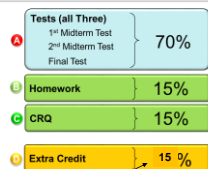
- Perform task(s) (**IF ANY**) assigned by the instructor
- For example:
  1. Inform if any lecture is missing on the Blackboard or/not accessible by the students

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### VOLUNTEER OPPORTUNITY !!!

- **Benefits of Volunteering**

- Volunteering:
  - Beefs Up Your Resume
  - Develops Leadership Qualities
  - Improves Social Skills
  - Learn to carry out responsibilities
  - Learn to communicate effectively
- You may qualify to earn \*extra credit of 25 points  
(\*if instructor feels that you learned leadership qualities and communication skills)



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## 8. Your Introduction

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### Time for Your Introduction

- Your Name
- Your Major
- Anything Else, For Example
  - Any Suggestions to make class more effective
- Do you
  - Feel comfortable answering oral questions?
  - Agree to adhere with the policies presented in this presentation?
  - If you have any concern or disagreement please email me within one week



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### Homework # 00

- Go through this ZERO lecture

Not to be Turned-In

Before making any query,  
please check this presentation.  
I am sure you will find answer to your question in it

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