## **NEW JERSEY INSTITUTE OF TECHNOLOGY**

Department of Mechanical & Industrial Engineering

## IE 672 Industrial Quality Control

**Fall 2013** 

**INSTRUCTOR:** George Abdou, Associate Professor, Room ME306

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**OFFICE HOURS:** Thursday: 3:00 - 5:00 p.m. and by appointment or good fortune

**LECTURE:** Thursday: 6:00 - 9:05 p.m. KUPF207

There will be no deviations from scheduled due dates and test dates. Assignments <u>will not be</u> <u>accepted after the noted deadline</u>. Exams will consider all materials covered in the lectures, which may not be in the book.

## **HONOR & ETHICS**

The code of unspoken ethics in a professional work environment in the US will apply in the classroom. That is, honesty and ethical conduct will not only be expected, but demanded. Please see me if you have any confusion on what I mean. Clearly, cheating on an exam is not permitted. Students caught in violation of this policy will earn a failing grades on their exam. Cooperation in responding to homework questions is not only permitted, but encouraged, as part of the cooperative learning framework of the course. You may discuss homework problems but not copy someone else's work. Any persons caught copying as well as the person providing the homework will be penalized.

Course Lectures and Requirements: available at <a href="http://Moodle.njit.edu/">http://Moodle.njit.edu/</a>

TEXT: "Introduction to Statistical Quality Control" Montgomery, 7<sup>th</sup> Ed., Wiley, 2013. GRADING: Final Exam ...40% Mid-term ...30% Projects....30%

Week	Topics	Chapter	Projects
09/05	Statistical Process Control	5	
09/12	Control Charts for Variables	6	Project 1
09/19	Other Control Chart Techniques	9-10	
09/26	Control Charts for Attributes	7	Project 2
10/03	Capability Analysis/Tolerance Spec	8	
10/10	Acceptance Sampling by Attributes	15	Project 3
10/17	Acceptance Sampling by Variables	16	
10/24	*** Mid Term Exam *** Chapters 5-10, 15-16		
10/31	Reliability	Handout	Project 4
11/07	Factorial Design	13	
11/14	Design of Experiments	14	Project 5
11/21	Taguchi Method	Handout	
11/26	Simulation	Handout	
(11/28-29)	Thanksgiving Recess-No Classes Scheduled		
12/05	Project Presentation		
12/12	*** Final Exam ***		