Instructor Name: Edward T. Meyers
Email Address: emeyers@jjc.edu
Office Location: T-1038
Office Telephone: 815-922-0835
Office Hours: 5:00pm – 10:00PM

Course Description: PCIT-221
IAI number: *

Credit and Contact Hours
* Credit Hours 4.0
* Lecture/Demonstration 2.5
* Lab/Studio/Clinical 2.5

Prerequisites: To be reviewed by Instructor

Books, Supplies, and Supplementary Materials
- Required Textbooks/Reading list
  *Instrumentation by Franklyn Kirk Fifth Edition
- Supplementary texts/materials
- Supplied in Angel
- Other resources utilized
  Hand Outs

Methods of Instruction:
- Lecture
- Laboratory

Student Learning Outcomes
This course will provide trouble shooting techniques and basic understanding of tuning parameters and control strategy. The class will emphasize of how a process control loop works using the proper tuning methods with control loops for temperature, level, pressure, and flow.

General Education Student Learning Outcomes
  Advanced Electronic Instrumentation and hands on exercises

Graded Assignments and Policies

Graded Assignments
Note: All work turned in must be neat and legible or it will be returned as not completed properly.

Grading Policy
Grading: A= 92-100%  B= 84-91%  C= 76-83%  D=67-75%
Major Tests and Quizzes

Tests and Quizzes: Tests will cover reading assignments from your text and all handouts. There will be one final exam and will include a lab test. There will be five quizzes. Quizzes will be given as needed and when time allows. The lowest scored quiz will not be counted. The four remaining quizzes will be combined as one test and averaged in with your other test scores. Make-up tests, quizzes or any other deviations should be discussed with the instructor in advance. Tests or quizzes not taken will be recorded as a zero.

Classroom Policies and Procedures

A. General Information (Include homework requirements.)

Labs: There will be five lab assignments. The lowest score will not be counted. The remaining labs will be combined as one test and averaged in with the other test scores. Labs not turned in on-time will be recorded as a zero. Safety during labs is always a must!!! Anyone performing any unsafe acts during lab exercises will get a reduced grade or zero for the lab they are assigned on that night. If you are uncertain how to continue with your lab assignment Stop Immediately!!! Get Help!!! There are No Exceptions to this Rule.

Homework Assignments: Homework is required to be completed and turned in on time. Homework will be corrected and reviewed for completion. Homework will not be graded but may lower your grade if not completed.

During Lecture Students will not be logged on the computer doing homework or other activities on the computer. Students visiting improper web sites that are not related to school work or obscene will be immediately ejected from the class.

B. Attendance Policy

Absentism: Students who miss three or more classes will be dropped from the class. Students who leave class early will not be eligible for make up. The instructor when notified in advance will approve special situations.

C. Make-up Policy

Make-up tests, quizzes or any other deviations should be discussed with the instructor in advance. Tests or Quizzes not taken will be recorded as a zero.

D. Extra-credit Policy

An extra credit question worth 10 points will be on each quiz and the final exam.

E. Final Exam Information

The final exam will be given on the last night of the class. The final exam will be counted as 33.33% of the total grade.

F. Academic Honor Code

The objective of the academic honor code is to sustain a learning-centered environment in which all students are expected to demonstrate integrity, honor, and responsibility, and recognize the importance of being accountable for one’s academic behavior.

(Instructors should clearly indicate the penalty they will impose for academic misconduct.)
G. College Statement about grades of “F” and withdrawal from class.
   - Students may withdraw from a course by processing an add/drop form during regular office hours through the Registration and Records Office at Main Campus or Romeoville Campus, or by phone at 815-744-2200. Please note the withdrawal dates listed on your bill or student schedule. Every course has its own withdrawal date. Failure to withdraw properly may result in a failing grade of “F” in the course.
   - At any time prior to the deadline dates established, an instructor may withdraw a student from class because of poor attendance, poor academic performance or inappropriate academic behavior, such as, but not limited to, cheating or plagiarism.

H. Intellectual Property
   Students own and hold the copyright to the original work they produce in class. It is a widely accepted practice to use student work as part of the college’s internal self-evaluation, assessment procedures, or other efforts to improve teaching and learning and in promoting programs and recruiting new students. If you do not wish your work to be used in this manner, please inform the instructor.

I. Student Code of Conduct
   Each student is responsible for reading and adhering to the Student Code of Conduct as stated in the college catalog.

J. Sexual Harassment
   Joliet Junior College seeks to foster a community environment in which all members respect and trust each other. In a community in which persons respect and trust each other, there is no place for sexual harassment. JJC has a strong policy prohibiting the sexual harassment of one member of the college community by another. See Catalog or Student Handbook.

K. Student Support [http://jjc.edu/services-for-students/pages/default.aspx]
   - Disability Services: [http://jjc.edu/services-for-students/disability-services/Pages/default.aspx]
     Student Accommodations and Resources (STAR): If you need disability-related accommodations, specialized tutoring, or assistive technology in this class, if you have emergency medical information you wish to share with me, or if you need special arrangements in case the building must be evacuated, please inform me immediately. Please see me privately after class or at my office. New students should request accommodations and support by scheduling an appointment with the Student Accommodations and Resources (STAR) Office, Campus Center 1125, (815) 280-2230.
   - Tutoring: [http://jjc.edu/services-for-students]
   - Counseling and Advising: [http://jjc.edu/services-for-students/counseling-advising]
   - Academic Resources: [http://jjc.edu/services-for-students/academic-resources]
   - Support Programs: [http://jjc.edu/services-for-students/support-programs-services]
   - Technology Support: [http://jjc.edu/services-for-students/Pages/technology-support.aspx]

L. Safety (This section is OPTIONAL and used at the instructor’s discretion.)
   Students with an impaired ability to concentrate may jeopardize safety in this classroom for themselves, their classmates and their instructor. If your ability to concentrate is impaired you should discuss this matter with your instructor prior to operating equipment or performing a laboratory procedure. Students are responsible for reporting to their instructor any condition that would impair the ability to concentrate. Failure to notify your instructor of this issue may be a violation of the Student Code of Conduct.

M. College Documentation Styles (This section is OPTIONAL and used at the instructor’s discretion.)
   MLA and APA have been adopted as the official documentation styles of the college. The selected documentation style for this class is ______.
<table>
<thead>
<tr>
<th>Week</th>
<th>Unit, Topic, Class Activity (Indicate approximate time allotment for each topic/unit)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Automation</td>
<td>5hrs</td>
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<tr>
<td>2</td>
<td>Tuning Control &amp; Strategy Manual Control, Automatic Control, and Feedback</td>
<td>5hrs</td>
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<tr>
<td>3</td>
<td>Controllers &amp; Process Control Modes Single Station Controllers Electronic &amp; Pneumatic Digital Controllers &amp; DCS &amp; PLC Two Position, Proportional, Integral, Derivative</td>
<td>5hrs</td>
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<tr>
<td>4</td>
<td>Process Control Fundamentals &amp; Introduction to Loop Tuning</td>
<td>5hrs</td>
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<tr>
<td>5</td>
<td>Basics of Self – Regulating Loops</td>
<td>5hrs</td>
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<tr>
<td>6</td>
<td>ISA Table Top</td>
<td>5hrs</td>
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<tr>
<td>7</td>
<td>Self – Regulating Tuning Demonstration</td>
<td>5hrs</td>
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<td>8</td>
<td>Manual Feedback Control, Cascade Control &amp; Ratio Control</td>
<td>5hrs</td>
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<td>9</td>
<td>Feed Forward Control</td>
<td>5hrs</td>
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<tr>
<td>10</td>
<td>Basics of Integrating Loops</td>
<td>5hrs</td>
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<td>11</td>
<td>Tuning Principles &amp; Tuning Map Methods</td>
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<td>12</td>
<td>On Line Tuning Exercise</td>
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<tr>
<td>13</td>
<td>Integrating Tuning</td>
<td>5hrs</td>
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<td>14</td>
<td>Process Control Loop Calibration and Tuning Exercise</td>
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<td>15</td>
<td>Cascade Loops and Advanced Tuning Topic</td>
<td>5hrs</td>
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<tr>
<td>16</td>
<td>Final Review &amp; Make Up</td>
<td>5hrs</td>
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<tr>
<td>17</td>
<td>Finals &amp; Lab Test</td>
<td>5hrs</td>
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</tbody>
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**Effective Date:** *1-17-2013*

(Faculty must submit a copy of each course syllabus to the Department Chair on or before the first day of class each term. Adjuncts may be given the syllabus of a full-time instructor. The signature does not need to appear on the syllabus given to students.)

Signature of Department Chair: _____________________________________________