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| College of DuPage | |
| Course Syllabus | <http://www.cod.edu> |
| ELECT 1105 Electricity and Electronics for Mechatronics | |
| Term: Spring - Year: 2015 | Course Date: |  |
| IAI Course Code for Majors: |  |  |
| IAI Course Code For General Education: |  |  |
|  | |  |
| Credit Hours | |  |
| Credit Hours: 3 | Lecture Hours: 2 |  |
| Lab Hours: 2 | Contact Hours: 4 |  |
|  | Clinical Hours: 0 |  |  |
| Catalog Description | |  |  |
| |  |  | | --- | --- | |  | Basic concepts in electricity and electronics are studied. An overview of analog and digital electronics such as circuit laws, components, devices, troubleshooting, and use of test equipment will be examined. | | |  |  |
| Course Methods of Instruction | |  |  |
| |  |  | | --- | --- | |  |  | | |  |  |
| Objectives/Goals Upon successful completion of this course, the student should be able to do the following: | |  |  |
| |  |  | | --- | --- | |  | 1. Discuss digital and analog circuitry concepts 2. Explain digital and analog devices 3. Apply basic circuit laws to solve electrical and electronic problems 4. Identify basic circuit components 5. Describe electrical circuit operating parameters 6. Determine electrical and electronic characteristics of circuits 7. Use test equipment troubleshoot circuits | | |  |  |
| Topical Outline This course will include but not be restricted to the following topics: | |  |  |
| |  |  | | --- | --- | |  | 1. Basic circuit components 2. Circuit test Instruments 3. Basic circuit laws 4. Electrical circuit operating parameters 5. Analog circuits 6. Analog devices 7. Analog circuit applications 8. Digital circuits 9. Digital devices 10. Digital circuit applications | | |  |  |
| Course Materials | |  |  |
| |  |  | | --- | --- | |  |  | | |  |  |
| Required Texts | |  |  |
| |  |  | | --- | --- | |  |  | | |  |  |
| Supplemental Assignments | | | |
|  | | | |
| Assignments | | | |
| Activities/Assignments | |  |  |
| |  |  | | --- | --- | |  | None | | |  |  |
| Examinations | | | |
|  | | | |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Your final course grade will be computed as follows:   |  |  |  | | --- | --- | --- | | Grade | Percentage | Points | | A= |  |  | | B= |  |  | | C= |  |  | | D= |  |  | | F= |  |  | | S= |  |  | | I= |  |  | | R= |  |  | | W= |  |  | | X= |  |  | | | |  |  |
| Withdrawal Policy | |  |  |
| |  |  |  |  | | --- | --- | --- | --- | |  | **Withdrawal from a Class**   |  |  | | --- | --- | |  | The final day for a student to withdraw from any course will be equal to 75% of the time for the respective academic session (see the Registration Calendar <http://www.cod.edu/registration/pdf/reg_calendar.pdf>) through myACCESS <https://myaccess.cod.edu> or in person at the Registration office, Student Services Center (SSC), Room 2221. | |  |  |  |  |  | | --- | --- | --- | --- | |  | **Administrative Withdrawal**   |  |  | | --- | --- | |  | After the deadline, students will be required to appeal for late withdrawal and provide appropriate documentation to the Student Registration Services Office for all requests. Students who are granted approval to withdraw by petition will not be eligible for refunds of tuition or fees and will receive a 'W' grade on their transcript. Appeals must be submitted prior to the designated final exam period for 16-week classes and before the last class meeting for all other session classes. | | | |  |  |
| Date\_Syllabus\_Prepared:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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