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| ***[Description: College of the Ouachitas](mailto:cboytt@otcweb.edu)A Higher Degree of You*** | **College of Arts and Sciences**  **Mechatronics** | **SYLLABUS**  **Spring 2017** |
| **Course Number**  **IEMT 1103** | **Course Name**  **Wiring Methods** | **Section**  **01** |

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| Instructor: | Glenn Franklin | | |
| Contact Information: | Email: gfranklin@coto.edu  Office Phone: 501.332.0255  Cell Phone: 501.317.8398  Mailing Address: One College Circle  Malvern, AR 72104 | | |
| Office Location:  Office Hours: | CAST Mechatronics Lab  MW 1:00 – 4:30 TTH 3:30 – 4:30 Fridays by appointment | | |
| Course Dates/Meeting Times: | January 19, 2017– May 12, 2017  **11:00 – 12:15 Monday/Wednesday CAST Building Mechatronics Lab** | | |
| Last Day to Drop with ”W” | Friday, April 7, 2017 by close of business | | |
| Holidays: | Spring Break : March 20-24 | | |
| Final Exam Information: | Wednesday, May 8th 10:30 – 12:30 | | |
| Textbook, Materials, Resources: | *Wiring Simplified*, Richter/Schwan/Hartwell, Park Publishing, 44th Edition  Tool Kit (Attached) | | |
| Course Description | This course is designed to give the student practical hands-on experience in electrical wiring techniques. This is a sixteen week class with 3 hours of class and 3 hours of lab per week. | | |
| Prerequisites: | IEMT 1303 Fundamentals of Electricity | | |
| Course Competencies: | Upon successful completion of this course the student should be able to:  1. Understand conduit and wire terminology.  2. Select the proper size of wire for a given application.  3. Select the proper size of conduit for a given application.  4. Properly bend and install electrical conduit.  5. Pull wire through an installed conduit run.  6. Cut and install armored cable wiring.  7. Install properly breaker boxes and power panels.  8. Wire a switch/path/load circuit.  9. Wire a three way switch.  10. Wire a four way switch.  11. Wire a standard electrical outlet.  12. Wire a GFCI overcurrent protection outlet.  13. Install service boxes and faceplates.  14. Properly connect and splice wiring.  15. Properly solder and de-solder wire. | | |
| Assessment Methods: | ***Tests***  There will 4 regular exams given throughout the semester. These exams are all worth 100 points each. There is NO makeup of exams that are missed. However, your lowest exam grade will be dropped, leaving the three highest scores. For every additional exam that is missed, a score of zero will be entered into your grade calculation.  ***Presentations***  Students will be given assignments to demonstrate skill mastery and subject knowledge.  Every student will be required during the course to **thoroughly** demonstrate a particular concept to the rest of the class. The student will be expected to answer any relevant questions concerning their concept presentation.  This demonstration is worth 100 total points.  .  ***Lab Activities and Assignments***  Over the course of the semester, there will be 10 laboratory assignments. Each assignment is worth 30 points. Students must complete all 10 of these labs **individually**. Each lab will be given a score of either 0 points or 30 points, based upon the presentation of the lab results to the instructor. | | |
| Attendance: | ***Class participation, preparedness, and attendance are of utmost importance to your success and a reflection of your commitment to school and to your future.***  Students are expected to attend **all** class meetings. Daily attendance will be recorded. If for some reason you absolutely must miss class it is **your** responsibility to obtain the assignment.  Attendance will be taken at the beginning of class by the instructor when class begins. If a student enters the classroom late, he/she may have the absence reduced to a tardy at the discretion of the instructor.  Students are allowed one absence without penalty. Absences 2-4 carry a penalty outlined in the Participation and Preparedness policy of this syllabus. If a 5th absence occurs before April 7, 2017 (withdrawal date) the student will be withdrawn from the class with a grade of “W”. If a 5th absence occurs **after** April 7, 2017, the student will be withdrawn from the course with the grade of “F”. Please note that differentiation is not made between excused and unexcused absences. Exceptions to this policy will not be made. | | |
| Printing | Every student with a network account will receive a $15 credit towards their printing allocation per semester. Students can print up to the $15 limit at no charge. For each black and white page printed, $0.10 will be deducted from this credit. For each color page printed, $0.40 will be deducted. Upon logging into a computer (library, computer lab, or computer classroom) your current balance will be displayed in the upper right hand corner of your screen.  If the $15 print limit is exceeded, students may purchase additional printing credits from the Business Office in amounts of $2 and $5. You may charge to your account prior to Pell and loan disbursement date. After Pell and loans have been disbursed, you must pay for the card at time of purchase. Printing credits do not accumulate or roll over from semester to semester and the initial $15 credit has no redeemable cash value. All printing credits will expire at the end of the semester. No refunds will be given for unused credits. | | |
| Participation and Preparedness: | Each student will be given 100 participation points at the beginning of the semester. Students will lose participation points according to the following:  Missing class -15 points each incident  Being tardy/leaving early -5 points each incident  \*\*Non participation/preparedness -15 points each day/incident  \*\* Non-participation includes, but is not limited to, sleeping in class, “playing” on the computer (which includes, but is not limited to, surfing the Internet or playing computer games) during lecture time or discussion, working on coursework for another class, text-messaging, listening to music, playing with cell phone, “goofing off”, etc. | | |
| Grade Calculation: | Written Exams  Presentation  Final Exam  Lab Projects and Experiments  Preparedness and Participation | 300 points  100 points  200 points  300 points  100 points  **1000 points total** | 30%  10%  20%  30%  10% |
|  | Mid-semester and final grades can be accessed through Self Service at [www.coto.edu](http://www.coto.edu). | | |
| Grading Scale: | 100-90 A  80-89 B  70-79 C  60-69 D  59 and below F | | |
| Classroom Policies: | Students are welcomed and encouraged to e-mail the instructor about this class, however **do not** add the instructor to your e-mail list or e-mail him material that is not class related.  Students must follow the COTO Computer Use Policy. The Computer Use Policy is posted in all computer classrooms/labs and is in the C*OTO Student Handbook*. Failure to comply with the policy could result in dismissal from the college.  Use of personal electronics is not permitted in class. DO NOT text in this class.  If there are personal issues that you need to discuss with the instructor, either make an appointment or visit with the instructor during the posted office hours.  Verbally abusive language and/or gestures toward another student and/or the instructor will result in removal from the course with a grade of “F”.  Please do not bring children to class. Bringing children to class is not conducive to learning and is strictly prohibited. | | |
| Academic Integrity: | As outlined in College Operation Policy No. 5.50, “Any student who engages in classroom disruption, cheating, plagiarism, or test tampering will be subject to disciplinary action . . .”  According to College policy, violation may result in lowered assignment scores, a failing grade in the class, administrative withdrawal from the College, or a combination of the above sanctions. | | |
| ADA Statement: | College Of The Ouachitas complies fully with the Americans with Disabilities Act (ADA). If any member of the class has a documented disability on file with the ADA Counselor, reasonable accommodations will be made as specified. Please advise the instructor of such disability at the end of the first class meeting. Arrangements for accommodations should be made the first week of class.  Testing modifications will require alternate testing day and time. | | |
| Inclement Weather Closing: | If inclement weather makes it necessary to cancel COTO classes, the announcement will be made to the following media:  Television – KARK Channel 4; KATV Channel 7; KTHV Channel 11  Radio – KCDI 93.3 FM; KISI 101.5 FM, KBOK 1310 AM; KLAZ 105.9 FM  COTO – call 501-337 -5000 and listen to option 6 form bulletin board announcement. | | |
| This initiative is partially funded by a DOL TAACCCT grant, awarded to the South West Arkansas Community College Consortium in 2013. This course is taught in space renovated by the grant. This work is licensed under a [Creative Commons Attribution 4.0 International License](http://creativecommons.org/licenses/by/4.0/).  cid:image002.png@01D0D5AF.326B99D0cid:image001.png@01D0D5AF.326B99D0 | | | |
| The following supplies was purchased by this grant:  Quantity of eight (8) Fluke Model 117 Electricians Multimeter  One (1) 6 ft Fiberglass Stepladder Model # FS106  Two (2) 3/4 inch conduit bender SKU 790-824  Eight (8) Klein Tools Model 11045 Wire Stripper SKU 576007  This equipment will be used to achieve core competencies:   1. Use meters to measure current, voltage, and resistance in DC and AC circuits. 2. Install proper conduit runs. 3. Correctly connect wiring to voltage source and load(s). | | | |

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| **Mechatronics Program Tool Requirements** | | | | | |
| Course: | | IEMT 1103 | Wiring Methods | | |
| **No.** | **Description** | | | **Part Number** | |
| 1. | Wire Strippers | | | Klein 11045 | MSC #: [01831775](http://www.mscdirect.com/product/details/01831775) |
| 2. | Wire Strippers | | | Klein 11046 | MSC #: [01831783](http://www.mscdirect.com/product/details/01831783) |
| 3. | Cable Strippers | | | Klein K1412 | Home Depot  SKU #128358 |
| 4. | Wire Cutters | | | Channellock 337 BULK | MSC #: [76635101](http://www.mscdirect.com/product/details/76635101) |
| 5. | Needle Nosed Pliers | | | Channellock 317 BULK | MSC #: [76634070](http://www.mscdirect.com/product/details/76634070) |
| 6. | Crimping Pliers | | | Irwin 2078310 | MSC #: [88095120](http://www.mscdirect.com/product/details/88095120) |
| 7. | 6 Piece Slotted and Phillips Precision Screwdriver Set | | | Wiha 26190 | MSC #: [88537188](https://www.mscdirect.com/product/details/88537188) |