

**CASPER COLLEGE COURSE SYLLABUS**  
**ELAP 1515-01, Independent Electrical Apprentice I**

**Semester/Year:** Fall 2015

**Lecture Hours:** 5

**Lab Hours:** 0

**Credit Hours:** 5

**Class Time:** 6:30-9:00 pm

**Days:** MW

**Room:** GW214/PS216

**Instructor's Name:** Mr. James Fagan  
Mr. Blesi

**Instructor's contact information:**

Mr. James Fagan

**Cell Phone:** 307-262-5364

**Email:** jfagan@caspercollege.edu

**Office Hours:** N/A

Mr. Blesi

**Office Phone:** 268-2459

**Office Number:** GW-116F

**Email:** jblesi@caspercollege.edu

**Office hours:** MW 9:00-10:00 a.m.  
M 12:00 -1:00 p.m. (CS)  
W 10:00 - 11:00 a.m.  
Th 12:00 - 1:00 a.m. (CS)

**Course Description:**

This is the first semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job-training received by electrical apprentices. This course is designed to provide the beginning electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include safety, introduction to the National Electrical Code, basic electrical theory, lighting and appliance circuits, and wiring methods.

**Statement of Prerequisites:**

Recommended status as a first-year Electrical Apprentice with an Independent Electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

**Course Goals:**

Upon completion of this course, the student will meet the requirements for continuation of the first year as an Electrical Apprentice. This vocational course is intended to provide entry-level training for employment in areas closely related to electrical wiring. As such, it is not intended to be transferred to other institutions, although it may be accepted by similar two-year vocational programs. Within the State of Wyoming, this course is transferable to any other Community College participating in the State approved Electrical Apprenticeship training program.

**Outcomes:**

1. Determine electrical behavior by applying theory to practical electrical circuits.

**Course Objectives:**

1. Wiring of houses to meet the requirements of the National Electrical Code.
2. Practice the safeguarding of persons and property from the hazards arising from the use of electricity.
3. Application of ohm's law, power law, Kirchoff's Voltage Law, and Kirchoff's current law to electrical circuits.
4. Differentiate between parallel and series paths in electrical circuits.

**Methodology:**

Lecture, demonstration, audio-visual materials, and practical applications will be used for instruction in this course.

**Evaluation Criteria:**

Students will be evaluated on homework, participation, and exams.

Grading Policy:	A	=	94% or better
	B	=	88 – 93%
	C	=	82 – 87%
	D	=	75 – 81%
	F	=	Less than 75%

**Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.**

**Required Text, Readings, and Materials:**

Electrical Wiring Residential, Mullin, Delmar Learning, 18<sup>th</sup> ed., 2014.

2014 NEC National Electrical Code.

Inexpensive scientific calculator.

**Class Policies: Last Date to Change to Audit Status or Withdraw with a W Grade:**

November 12, 2015

Attendance is required by the Department of Fire Prevention and Electrical Safety and Casper College. All students must have at least 72 hours of attendance per semester. Less than 72 will result in failure.

No student will be allowed to take midterm or continue attending class if not registered by October 12.

**Safety:**

Personal and equipment safety standards will be strictly enforced. *It is the individual's responsibility to develop and use a safe work attitude.* Disregard for the safety of yourself and/or others will result in dismissal from the class.

**Student Rights and Responsibilities:**

Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Chain of Command:**

If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

**Academic Dishonesty:**

(Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:**

Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

**ADA Accommodations Policy:**

If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, [bheuer@caspercollege.edu](mailto:bheuer@caspercollege.edu). The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

<b>ELAP 1515</b>	<b>FALL 2015</b>	<b>/Blesi</b>
<b>Week</b>	<b>Unit</b>	<b>Topic</b>
1		introduction/orientation
2	1	general information
3	2	electrical symbols and outlets
4	3	determining the required number and location for lighting and small-appliance circuits
5	EX	review, exam #1 (units 1 to 3)
6	4	conductors, wiring methods, wire connections, sizing
7	5	switching
8	6	ground fault, arc fault
9	EX	review, exam #2 (units 1 to 6)
10	7	luminaires, ballasts, and lamps
11	8, 9	lighting for bedrooms
12	10, 11	lighting for branch-circuits
13	EX	review, exam #3 (units 1 to 11)
14		No class Wednesday
15	12, 13	lighting for branch-circuits
16	13, 14	lighting for branch-circuits
17	EX	Final (units 1 to 14)