# Grayson College Career and Technology Center Department Spring 2021 Faculty Instructor's Syllabus

Please Note: Due to extenuating circumstances, including public health issues, course and testing delivery methods, instructional schedules, housing contracts, campus procedures and/or operating hours may be altered, interrupted and/or ceased for a limited or extended period of time. Such changes will be posted on the College website.

**Professor's Name:** Buford Richardson **Office** CTC - 121 **Phone:** 903-463-8773

Location:

MW 9:00AM - 5:00PM

Email: Richardsonb@grayson.edu Office Hours: TR 9:00AM - 5:00PM

Email or call to schedule appointments

Your instructor may be reached through the Canvas Inbox, email, or phone. However, the easiest way to contact your instructor will be through the Inbox link in Canvas. You should receive a reply within 24 – 48 hours. Please resend your message should you not receive a reply within that timeframe. If you choose to contact me through <a href="mailto:Richardsonb@grayson.edu">Richardsonb@grayson.edu</a>, please tell me your name and the class you are enrolled in the subject line of your email message. Please know that I will only respond to message sent via **Canvas** or your **Viking email** account.

Course Title: Motor Control Course Number: ELPT - 1441 Section Number: A01

Classroom: CTC - 117 Class Meeting Times: MW 1:00 PM - 3:30 PM

**Course Description:** ELPT 1441. Operating principles of solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations. Identify practical applications of jogging and plugging; describe the types of motor braking and their operating principles; explain different starting methods for large motors; and demonstrate proper troubleshooting methods on circuits using wiring and schematic diagrams 4-2-2 course.

#### **Textbook and Required Material:**

<u>Understanding Motor Controls</u>, 4th Edition

Stephen L. Herman

ISBN-10: 1-337-79868-1 ISBN-13: 978-1-337-79868-6

**Software Requirements:** This course requires MindTap for Herman's Understanding Motor Controls, 4th Edition. MindTap is available for purchase on its own (ISBN 9781337798761) for \$90.00, or through Cengage Unlimited, a subscription that gives you access to all Cengage online textbooks and access codes in one place—for \$119.99 per semester, \$179.99 per year or \$239.99 for two years. No matter how many Cengage products you use, they are included in Cengage Unlimited at no additional cost. You also have the ability to request a limited number of free hardcopy textbook rentals, just pay \$7.99 S&H each. Cengage Unlimited is available in the bookstore or at cengage.com/unlimited.

**Registering:** To access your course materials and explore Cengage Unlimited, log in to Canvas and navigate to https://www.cengage.com/dashboard/#/course-confirmation/MTPP67SQXTXF/initial-course-confirmation. When prompted, create your Cengage account or log in to an existing one and follow the prompts to complete the registration process. For step-by-step help getting registered, head to https://www.cengage.com/student-training/mindtap/canvas/ia-no/ and check out our training video and instructions.

Required Tools: Safety Glasses, Pen/pencil, notebook paper, calculator

#### Online learners need basic technical skills to succeed.

#### Applications/tools you'll need:

- Access to a computer or laptop (equipped with a webcam and microphone is preferred)
- Grayson email address
- Internet access (high-speed internet connections are best for accessing streamed lecture videos)
  - If access to high-speed internet is a barrier, alternatives to view video content include: viewing in low definition setting, downloading video file to computer for later viewing, or reading lecture transcripts
- Access to word processing software such as Microsoft's Word
- Access to Excel
- Access to PowerPoint is preferred, contact instructor to see if this is needed
- Ability to convert a document to a PDF file format
- Access and ability to navigate Canvas

#### Skills you'll need:

- Ability to use a web browser to navigate the Internet
- Ability to check and disable popup blockers
- Ability to download and upload documents
- Ability to post discussions in Canvas
- Ability to attend Canvas Conferences at scheduled times

#### **Time Management:**

Take charge of your learning from the beginning of the course; allow no time for procrastination to set in. It is recommended that you:

- Log on to your course at least three or four times per week to stay on top of announcements, assignment due dates, and discussion forums (Every login is recorded, the time spent on individual assignments are recorded, and therefore used to determine on-line participation)
- Read the syllabus on the first day of the course; print off a hard copy or keep a digital copy on your mobile device to refer to throughout the course
- Record all dates for assignments, exams for the entire course in your calendar and add reminders

Prerequisite(s): ELPT1311A01 Basic Electrical Theory

Corequisite(s): Advanced Manufacturing AAS, Advanced Manufacturing Technician Certificate

Credit Hours: 4 Lecture Hours: 3 Lab Hours: 1

**Methods of Instruction:** Lecture/examples of problems, homework Q&A, videos (when applicable), online media called Mindsight which is an online lab volt platform to preform lab simulations and exams , and last but not least there will be hands on labs to test proficiency and student understanding.

This class will be taught in a hybrid format to allow for social distancing. Students will be required to attend in person. Students will be required to follow protocols set forth by Grayson College when attending class or appointments on campus.

Methods of instruction include lectures, online homework and discussions, classroom discussions, demonstrations, student performances, lab assignments, and research.

The student is required to read text assignments, perform applied arithmetic and mathematical operations, listen and participate in labs and discussions in class.

Instructional aids include related labs, slide presentations, computer systems, multimedia instructional packages, and product cutaways.

**Student Learning Outcomes:** (Upon completion of this course, students should be able to do the following.)

- 1) The student will be able to identify practical applications of jogging and plugging
- 2) The student will identify the types of motor braking and their operating principles
- 3) The student will be able to describe the different starting methods for large motors
- 4) The student will be able to demonstrate proper troubleshooting methods on circuits using wiring and schematic diagrams

Method of Evaluation: (Grade will be determined by averaging the individual components using the scale shown below.)

#### **Grading Categories Percentage**

50% Assignments/Daily Projects/Quizzes/Labs/Unit Exams

40% Midterm/Final Exam

10% Classroom participation/Attendance

100% Total

**Grading Scale:** A = 89.5 - 100 B = 79.5 - 89.4 C = 69.5 - 79.4 D = 59.5 - 69.4 F = 0 - 59.4

**Grade Posting:** Grades for each assignment will be posted in Canvas under the course Grades tab. These grades will be posted no later than 7 days after the posted due date.

#### **Grading Rubric labs and or assignments:**

The following table illustrates the way in which points will be deducted for errors made on assignments and exams.

Percentage of total point value to be deducted	Description of error(s)	
0% - 30%	Minor Error	
	<ul> <li>Correct mathematical notation was not used.</li> <li>The sequence of steps was not written in a logical and organized manner.</li> </ul>	
	Variables were not identified.	
	Units were not designated.	
	<ul> <li>The method of solution is correct, but there is a sign, arithmetic, copying, or similar minor error in the work.</li> </ul>	
	Correct grammar was not used when a verbal response was required.	

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30% - 70%	Significant Error		
	The method could have worked; a correct start was made, but a substantial error or errors led to the wrong conclusion or design.		
	<ul> <li>Poor notation, organization, or handwriting made it difficult to follow and understand for the reader.</li> </ul>		
	<ul> <li>A correct method was started, but not completed.</li> </ul>		
70% - 100%	Major Error		
	<ul> <li>Instructions were not followed.</li> </ul>		
	<ul> <li>Method of solution or design was incorrect.</li> </ul>		
	Problem was left blank.		

#### **Homework Policy:**

This course may require the completion of homework assignments designed to enhance your understanding of the material presented in class.

You should also complete the pencil and paper homework for each section. Textbook homework problems may posted in Canvas for additional practice, some may be assigned a grade if more study is needed. Since the major exams will be on-line, it is highly advisable that you do not neglect this learning method.

Math and design is a cumulative subject that requires frequent practice in order to develop your skills. If one topic is confusing, then the next topic is likely to be more confusing. The general rule of thumb is to spend two hours studying for every hour spent in class. This translates to six hours per week. Your proficiency with math and design and your success in this class will depend on active practice.

#### **Quiz Policy:**

All quizzes must be completed using Pen and paper or online via Canvas and Mindtap. There will be a 10% penalty for missed quizzes past their due date. The lowest score will be dropped.

#### **Exam Policy:**

Unit exams will be given in the classroom during normal lecture hours or online – observe the weekly schedule on the last page of this syllabus. There will be a 10% penalty for missed exams past their due date; however the lowest exam grade will be dropped. This 10% penalty does not count toward the midterm or final exam, any missed midterm or final will result in a zero. Please see your professor in the case of technical issues or interruption of face-to-face instruction due to unforeseen circumstances.

You will also **NOT** be allowed to use your cell phone or any other electronic device during a test other than a calculator.

#### Make-up Policy:

A student may request a make-up exam or quiz without penalty in the case of an EXTREME EMERGENCY. The instructor decides what constitutes an EXTREME EMERGENCY. Make-up exams must be completed by the time established with the instructor. You only have three days past the due date to receive the 10% penalty, anything past that will be counted as a zero.

Notice to the instructor should be given as soon as possible or as health allows to inform the instructor of an unforeseen absence. The instructor may require proof of hardship in the event a make-up is requested.

#### **Attendance Policy:**

Academic success is closely associated with regular class attendance and course participation. All successful students, whether on campus or online, are expected to be highly self-motivated. All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their faculty's instructions. Students taking courses during compressed semester timeframes such as mini-mester, summer sessions, and 8-week courses should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. Instructors are required to include in their syllabi the attendance policy for the courses(s) they teach. The college considers absences equal to or greater than 15% of the course's requirements to be excessive

In order for students to be counted as having attended a class before the census date, the following guidelines are to be used:

- Physical attendance in class with an opportunity for instructor and student interaction
- Submission of an academic assignment
- Completion of an exam, interactive tutorial, or computer-assisted instruction
- Attendance at a study group assigned by the faculty
- Participation in an online discussion in the class
- Contact with a faculty member to ask a question

Attendance in this course will be taken for each class period. In the event face-to-face instruction is interrupted by unforeseen circumstances, instructors will take attendance weekly based on the guidelines mentioned above.

#### **Monitoring Online Activities:**

Student activity will be monitored several times per week using Canvas activity reports, and Canvas discussion board activity.

#### Professionalism, Etiquette, and Netiquette:

Professionalism is a set of behavioral skills that are directly transferable to the workplace and that gives a graduate distinctive value. Professional skills enable a more seamless transition from college life to professional life, and include:

- Respect for all individuals, groups, and people.
- Ability to handle stressful situations with professionalism.
- Punctuality and organizational skills.
- Ability to network and establish new relationships.
- Ability to contribute positively to a diverse team.

When communicating with your instructor or classmates online (e.g. through email, discussion forums, or other applications), be as civil and professional as you would in face-to-face interactions:

- Be respectful to those with whom you may disagree and avoid any language that may be construed as angry, hateful, or inappropriate. Please understand that the use of all capital letters in a message indicates aggressive language.
- Respect the privacy of anything that is communicated to you in confidence (i.e. never forward private emails to others without the sender's consent or understanding).
- Always review your messages for clarity and tone before sending an email or posting in a discussion forum.

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#### **Resource Material:**

Any student enrolled in this class has access to the Math Hub located in the Student Success Center, room SSC-200, and can be reached at (903) 463 – 8663. The lab is staffed with faculty and tutors; in addition, it offers free tutorial help, calculators, and a computer area to watch math videos or work on your online math homework. For more information on the Math Hub (including an orientation video, a video showing how to get to the Math Hub on the Denison campus and hours of operation) go to the following web site: <a href="tinyurl.com/tutoring-mathhub">tinyurl.com/tutoring-mathhub</a>

Due to COVID-19 precautions, the Math Hub will restrict face-to-face tutoring to occur by appointment only. Virtual tutoring will be available through the Math Hub and UPSWING. Please see the announcement in Canvas for instructions on how to access these resources.

#### **Disabilities Services:**

The College is committed to meeting the special needs of disabled students and coordinates with agencies such as Texas Department of Assistive and Rehabilitative Services and Texas Department of Human Resources to provide appropriate accommodations.

Students with documented disabilities should contact the Disabilities Services Coordinator in the Success Center preferably before classes start or as early in the semester as possible. Once appropriate documentation for the disability is received, the Disability Services Coordinator will coordinate delivery of approved accommodations with students and their instructors. The College makes the following services available to students with documented disabilities: tutoring, note taking, sign language interpreting, special testing conditions, taped textbooks, scribes, special/modified equipment, and other appropriate services.

#### **Drop/Withdrawal Regulation:**

Under section 51.907 of the Texas Education Code, "an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education." Please consult your instructor before you drop a course, and check the current Grayson Registration Guide for the last official day to drop/withdraw from a course.

#### **Drop/Withdrawal Procedure:**

To drop this course, you will need to do the following:

- 1. Attain a Drop/Add form from your instructor or the Admission's Office.
- 2. Turn in the completed Drop/Add from to the Admission's Office on or prior to the drop date.
- 3. Make sure your course withdrawal satisfies the college withdrawal policy.
- 4. You may receive an F if you do not finish this class and do not drop prior to the drop deadline.

#### **Religious Holy Days:**

Grayson College will allow students who are absent from class for the observance of a religious holiday to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. The form for requesting absence for holy days may be obtained from the Vice President for Student Services. "Religious holy day" denotes a holy day observed by a religion whose places of worship are exempt from property taxation under section 11:20, Tax Code. A student who is excused under this section may not be penalized for the absence, but the instructor may appropriately respond if the student fails to satisfactorily complete the assignment or examination.

#### **Evaluation of Instruction:**

Grayson College seeks to improve the learning experience of all students. To assist in evaluating courses, students will be requested to complete an online evaluation-of-instruction near the end of the semester.

#### **Student Responsibility**

You have already made the decision to go to college; now the follow-up decisions on whether to commit to doing the work could very well determine whether you end up working at a good paying job in a field you enjoy or working at minimum wage for the rest of your life. Education involves a partnership that requires both students and instructors to do their parts. By entering into this partnership, you have a responsibility to show up for class, do the assignments and reading, be engaged and pay attention in class, follow directions, and put your best effort into it. You will get out of your experience here exactly what you put into it — nothing more and nothing less.

#### **Student Code of Conduct**

Students are expected and required to maintain classroom decorum that includes respect for other students and the instructor. Any student not following this rule will be warned in private and if there is no change in the behavior, the student will be asked to leave the class or receive disciplinary actions according to the Student Handbook - http://grayson.edu/current-students/catalogs-and-handbooks/Student%20Handbook%202016.pdf

Students are expected to have prompt and regular attendance, and an attitude that seeks to take full advantage of the educational opportunity.

Safety the main priority of our students, due to the nature of the courses provided there are many risk associated with the instruction; therefore any behavior that disrupts the learning environment or attention of the students will not be tolerated. Disruptive behavior includes but is not limited to talking while another student or the professor is speaking and horseplay. Cell phones should be turned off during class, this includes texting. If you truly have an emergency situation, put the phone in silent or vibrate mode and leave the room to answer if you must. Any safety violations can result in an immediate removal from the class and or course.

#### **Academic Integrity Policy**

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrates a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material.

Academic honesty will be ensured by the fact that 70% of your course grade will be earned while in a proctored and secured environment. If caught cheating (looking at another student's test, using notes within the test, or using an unauthorized software program) while taking a test in a proctored testing center you will be disciplined as follows:

- 1st offense will result in a grade of 0 for the exam in which the offense was committed along with a written letter to be added to his/her academic file.
- 2nd offense will result in a grade of F for the course along with a written letter to be added to his/her
  academic file and given to the dean of academics for further review.

#### **Plagiarism Policy**

Plagiarism is a form of scholastic dishonesty involving the theft of or fraudulent representation of someone else's ideas or words as the student's original work. Plagiarism can be intentional/deliberate or unintentional/accidental. Unintentional/Accidental plagiarism may include *minor* instances where an attempt to acknowledge the source exists but is incorrect or insufficient. Deliberate/Intentional plagiarism violates a student's academic integrity and exists in the following forms:

- Turning in someone else's work as the student's own (such as buying a paper and submitting it, exchanging papers or collaborating on a paper with someone else without permission, or paying someone else to write or translate a paper),
- Recycling in whole or in part previously submitted or published work or concurrently submitting the same written work where the expectation for current original work exists, including agreeing to write or sell one's own work to someone else,
- Quoting or copy/pasting phrases of three words or more from someone else without citation,
- Paraphrasing ideas without citation or paraphrasing incompletely, with or without correct citation, where the material too closely matches the wording or structure of the original,
- Submitting an assignment with a majority of quoted or paraphrased material from other sources, even if correctly cited, when original work from the student is expected,
- Copying images or media and inserting them into a presentation or video without citation,
- Using copyrighted soundtracks or video and inserting them into a presentation or video without citation,
- Giving incorrect or nonexistent source information or inventing source information,
- Performing a copyrighted piece of music in a public setting without permission,
- Composing music based heavily on someone else's musical composition.

#### **GC Title IX Policy**

GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, nation origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veteran's status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on Title IX, please contact:

- Dr. Molly M. Harris, Title IX Coordinator (903) 463-8714
- Ms. Logan Maxwell, Title IX Deputy Coordinator South Campus (903) 415-2646
- ❖ Mr. Mike McBrayer, Title IX Deputy Coordinator Main Campus (903) 463-8753
- Website: http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html
- ❖ GC Policy Department: (903) 463-8777 Main Campus (903) 415-2501 South Campus
- ❖ GC Counseling Center: (903) 463-8730
- For Any On-campus Emergencies: 911

Grayson College campus-wide student policies may be found on our Current Student Page on our website: <a href="http://grayson.edu/current-students/index.html">http://grayson.edu/current-students/index.html</a>

#### **GC ALERT & EMERGENCY MANAGEMENT**

Current students of Grayson College, Faculty, Staff, and the general public can register to receive voice and email messages via GC Alert, the college's emergency notification system. This web-based service sends high-priority messages during urgent situations. Manage your contact profile to the service through GC Alert. You can update your contact information for receiving alerts, and you can add, delete, or update your devices. For more information, please visit the website at <a href="http://grayson.edu/campus-life/campus-police/emergency-management.html">http://grayson.edu/campus-life/campus-police/emergency-management.html</a>

#### **IMPORTANT DATES**

• January 11 Classes begin

• March 8-12 Spring Break

• February 21 Last day to drop a class

May 3-6
 Final Exams

The final exam for this class will be on May 3

Grayson County College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

These descriptions and timelines are subject to change at the discretion of the Professor.

Grayson College campus-wide student policies may be found on our Current Student Page on our website: <a href="http://grayson.edu/current-students/index.html">http://grayson.edu/current-students/index.html</a>

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

# **Course Calendar for ELPT – 1441.A01 (Subject to Change)**

## Monday

## Wednesday

<b>Week 1</b> 01/11 – 01/15	Syllabus, Canvas, Mindsight, Cengage, and Safety <b>Due January 17</b>	Chapters 1 & 2 <b>Due January 24</b>
Week 2 01/18 – 01/22	Martin Luther King Jr. Day  No Classes	Chapters 3 & 4  Due January 31
Week 3 01/25 – 01/29	Chapters 5 & 6  Due February 7	Chapters 7 & 8 <b>Due February 7</b>
<b>Week 4</b> 02/01 – 02/05	Chapters 9 & 10  Due February 14	Chapters 11 & 12  Due February 14
<b>Week 5</b> 02/08 – 02/12	Chapters 13 & 14  Due February 21	Chapters 15 & 16  Due February 21
<b>Week 6</b> 02/15 –02/19	Chapters 17 & 18  Due February 28	Chapters 19 & 20  Due February 28
<b>Week 7</b> 02/22 – 02/26	Chapters 21 & 22  Due March 7	<u>Midterm Lab</u> Due March 1-3
<b>Week 8</b> 03/01 – 03/05	Midterm Prep	<u>Midterm</u> Due March 3
<b>Break</b> 03/08 – 03/12	SPRING BREAK	SPRING BREAK
<b>Week 09</b> 03/15 – 03/19	Chapters 23 & 24  Due March 28	Chapters 25 & 26  Due March 28
<b>Week 10</b> 03/22 – 03/26	Chapters 27 & 28  Due April 4	Chapters 29 & 30 <b>Due April 4</b>
<b>Week 11</b> 03/29 – 04/02	Chapters 31 & 32  Due April 11	Chapters 33 & 37 <b>Due April 11</b>
<b>Week 12</b> 04/05 – 04/09	Chapters 41 & 42  Due April 18	Chapters 43 & 44 <b>Due April 18</b>
<b>Week 13</b> 04/12 – 04/16	Chapters 45 & 46  Due April 25	Chapters 47 & 48 <b>Due April 25</b>
<b>Week 14</b> 04/19 – 04/23	Chapters 49 & 50  Due May 2	Chapters 51 & 52  Due May 2
<b>Week 15</b> 04/26 – 04/30	<u>Finals Lab</u> Due April 26 – 28	Final Prep
<b>Week 16</b> 05/03 - 05/06	Final Exam Due May 3	Instructor Evaluation

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