Instructors: Greg Mulder (<u>mulderg@linbenton.edu</u>, (541) 917-4744)

Ralph Tadday (taddayr@linnbenton.edu, (541) 917-4743)

Due to COVID-19 this course will be taught remotely, supported by ZOOM meetings. The syllabus might change. Please check our Moodle page for updates. We plan to meet initially MW 4pm – 5pm (Originally planned class time)

Student Zoom Hours: Greg:

Ralph: MW 11 am - 11:45 am, F 10:30am - 11:30am

When and where this course meets on ZOOM: (initially) MW 4:00 pm - 4:50 pm

The purpose of this class is to examine modern topics in physics. You can take this class for one, two, or three credits. If you take this class for more than one credit you will need to develop a project plan during the first week of classes.

Each week in this seminar class we will explore a current topic in physics. For each topic there will be discussion along with a group activity on Zoom. Notes from class and from the in-class activities should be kept in your Journal.

We suggest that you sign up to become a member of the Society of Physics Students. The cost for undergraduate membership is \$20 per year and include the hardcopy subscription to "Physics Today". You can sign up for this at: http://www.spsnational.org

Tentative Schedule:

Week 1: Nuclear Decay and Particle Physics

Week 2: Time Dilation and Relativity

Week 3: Dark Matter

Week 4: The Photoelectric Effect and Quantum Mechanics

Week 5: Cosmology

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Students in need of accommodations: Students who may need accommodations due to documented disabilities, who have medical information that the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR website at www.linnbenton.edu/cfar for steps on how to apply for services or call 541-917-4789.

LBCC Nondiscrimination Statement: LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.

HELP: Any student who has difficulty affording groceries or food, or who lacks a safe and stable place to live, is urged to contact a Student Resource Navigator in the Single Stop Office (T-112): Amanda Stanley, stanlea@linnbenton.edu, 541-917-4877. The navigator can connect students to resources. Furthermore, please talk with your instructors if you are comfortable doing so. This will enable us to provide any resources we might have.

Perusall: Perusall is an interactive platform creating to read and discuss written text in a group, while being in remote locations. Your instructors have tested this platform for discussions about physics education, and both believe that for this class and particular under the given circumstances we would all enjoy having a more interactive reading experience of the exciting physics materials we want to discuss in this class. We will make sure you are a part if this experience, and listen to your feedback! You can register at https://app.perusall.com/home and enroll into the course for PH299 using the following course code: TADDAY-3FKYK

Grading:

You may take PH 299 for 1 credit, 2 credits or 3 credits.

If you are taking the 1 credit version you must complete the reading assigment each week:

- · Reading assignment (completed on Perusall)
- At the end of the term you will turn in your Score Sheet below.

Final Grade:

9-10 points A 7-8 points B 5-6 points C 3-4 points D

If you are taking PH 299 for more than one-credit you must submit a project-plan during the first week of the term.

Score Sheet

Please keep track of your participation in your reading participation by filling out this sheet. Email this sheet to the instructor at the end of Week 10. Each assignment is worth 1 point for a total of 10pts in the class.

	Topic	Reading Assignment on Perusall Completed
Week 1a		
Week 1b		
Week 2a		
Week 2b		
Week 3a		
Week 3b		
Week 4a		
Week 4b		
Week 5a		
Week 5b		

For students taking PH 299 for more than one credit, you must submit a weekly progress report to your instructor as well. Check off here after you've submitted your progress report.

Week	1	2	3	4	5	6	7	8	9	10