Intro to Computational Physics (PHY 210)

Spring 2024

Scott N. Walck

Course Information

Contact Information

- Instructor: Scott N. Walck
- Preferred names: Scott, Dr. Walck, Prof. Walck (I prefer not to be called by my unadorned last name.)
- Pronouns: He, his, him
- Office: Neidig-Garber 223
- Office Phone: 717-867-6153 (messages reach me by email)
- Email: `walck@lvc.edu`
- Web page: `http://quantum.lvc.edu/walck/`

Email is the best way to contact me. Many questions and issues can be solved over email.

Office Hours

I will be in my office

every

Monday	11:00–12:00
Tuesday	11:00–12:00
Tuesday	1:00– 2:00
Wednesday	11:00–12:00
Friday	11:00–12:00

during the course of the Spring 2024 semester.

If you would prefer a Zoom meeting, or would like to schedule an in-person meeting at a time outside the office hours above, please send me an email to set that up. You can drop by my office any time to see if I am there. If I'm there, we can chat.

My Zoom personal room is

- Meeting ID: 744 519 1002
- `https://lvc-edu.zoom.us/j/7445191002`

Meeting Times and Locations

We meet Monday, Wednesday, and Friday from 2:00-2:50 in N-G 211. The first week of classes (January 15, 17, and 19) will be held online, as Dr. Walck recovers from his hospital stay.

Course Description

An introduction to the approximate numerical solution of physical problems with computers. The course focuses on problems from mechanics and electromagnetics that are not analytically solvable. Topics include realistic projectile motion, planetary motion, and electromagnetic fields produced by charge and current distributions. Physics 210 consists of 3 credits hours; it has 3 contact hours per week. Physics 111 is a prerequisite for Physics 210.

Course Objectives

It is expected that students will

1. describe Newton's second law in the Haskell programming language (Goals 1, 2, 4)
2. interpret Haskell code and explain what it does (Goals 2, 4)
3. apply the Euler method to solve differential equations (Goal 2)
4. calculate quantities of physical interest using the computer (Goals 1, 2)
5. explain how Newton's second law relates to the state of a mechanical system (Goals 1, 4)
6. program a computer to solve physical problems using the Haskell programming language (Goals 1, 2, 4)

Program Goals for the Physics Major

These goals are referred to in the course objectives above.

1. Graduates from our program will have a working understanding and knowledge of fundamental areas in physics.
2. Graduates from our program will have a working understanding and knowledge of mathematics along with computational skills necessary for advanced work in physics.
3. Graduates from our program will be skilled in the methods of scientific research and investigation.
4. Graduates from our program will have effective written and verbal communication skills.
5. Students will apply learning in situations where they develop and hone professional activities and show evidence of an applied and integrated skill set.

Philosophy

We're not going to ask the computer to do anything that we don't know how to do. The computer is not going to do magic for us. (One of the problems with packages such as Mathematica is that the computer seems to magically come up with the answer. This is not an empowering situation for us. We have lost control of the situation when we don't

have a basic idea of what the computer is doing for us.) We're going to ask the computer to do the things that we know how to do (arithmetic, keeping lists, etc.) many more times than we would be willing to do them. The computer is willing to be repetitive in ways and quantities that we are not. This simple extra ingredient of repetitiveness will give us a surprising amount of power to calculate things that we are interested in, without sacrificing control and understanding of what the computer is doing.

While we will ask the computer to do only things that we know how to do, it may be the case that the way the computer does them is different from the way we do them (in some sense it's obvious that this must be the case). It is not our main interest in this course to ask how the computer does its simple jobs. These are very interesting questions that more properly belong to the subjects of computer science and computer engineering.

Textbook

The textbook for the course is *Learn Physics with Functional Programming* by Scott N. Walck, ISBN 978-1-7185-0166-9.

Exercises and Projects

This course will have a strong project focus. I hope that you will find the projects challenging, engaging, and fun. I encourage you to work together on the projects as far as talking about what techinques to use or the syntax of the programming language. However, each person is expected to write her or his own code and produce his or her own solutions and reports independently. To this end, please do not to share the code you've written with others who are still thinking about how to do it. Please do not look at the code other people have written. For a person that's still thinking about how to do something (and we're all in this stage at some point), seeing the way that someone else solved the problem tends to shut down our brain toward other, possibly even better, ways of doing it. Much of the learning in this course takes place when you have an idea about how to do something, and you try it and see if it works.

You may copy and use any of the code in the textbook. You may make small or big changes to any of the code in the textbook and submit this as part of an exercise or project.

Haskell is a very terse programming language. You can say a lot with one line of code. There can be many decisions to make in crafting one line of code. If you look at someone else's code, many decisions have already been made. If the code is for an assignment, each person should be making their own decision about how to write things. You may talk about how to do things with others, but please do not share your code. In this course, sharing the code you've written for an exercise or project is an act of academic dishonesty.

Codes written independently will typically look very different from each other. In the past, one of my students took another person's work, changed the variable names and the spacing, and turning it in as their own. This is an act of academic dishonesty. Be academically honest, and write your own code. Start your work early so that there will be time to ask me questions when you get stuck.

It is absolutely *delightful* to write a piece of code yourself and find that it compiles and works. You will minimize your delight if you ask for too much help from other people. You will maximize your delight if you do as much as you can yourself, and just ask for little hints when you get stuck.

A significant amount of out-of-class time will be required to finish the exercises and projects on schedule.

For each exercise or project that you turn in, include all of the things that are relevant to show me the work that you did. Usually, this will include a copy of the code, results, and examples of use of the code (such as results for different input values).

You cannot succeed with this course if you wait until the day before an exercise or project is due to start. Start a week before the due date by reading the assignment and seeing how much you can do. Come to me with questions, or any time you get stuck.

Exams

There will be three 50-minute exams during the normal class time. The purpose of the exams is to give you an opportunity to demonstrate what you've learned about physics. An exam is an individual endeavor in which you write and submit *your* ideas, *your* solutions, *your* guesses, and *your* work.

During an exam,

- you *may not* communicate with other people,
- you *may not* share a calculator or computer with anyone else,
- you *may not* use the notes of other people, and
- you *may not* search for help on the web or anywhere else.

If you have any questions about whether a particular resource is allowed or not allowed during an exam, please ask me.

At the end of the semester, we will have a comprehensive final exam.

You should not think that office hours are only a time for people that need remedial help. Coming to office hours is helpful for people at all levels. Nobody is too advanced or too far behind to benefit from coming to office hours. A typical student in this class probably cannot get a high grade without coming to office hours, at least from time to time. Even if you don't have specific questions, I can suggest problems for you to work on that will deepen your understanding, putting you in a better position for exams.

Class Participation

A portion of your grade is determined by class participation. Obviously, attendance is a prerequisite for participation in class. If you attend every class, and participate by asking questions, answering questions, and taking your turn being scribe for exercises we do in class, you will have a perfect score for this area. If you need to miss a class, see me in advance and I'll give you an alternative assignment.

Grading

Your overall grade will be determined by a weighted average as indicated in the table below.

Exercises and Projects	50%
Exams	30%
Participation	5%
Final Exam (comprehensive)	15%

Your letter grade for the course is determined by the weighted average. The minimum weighted average (out of 100) required for each letter grade is indicated below.

A   93
A-   90
B+   87
B   83
B-   80
C+   77
C   73
C-   70
D+   67
D   63
D-   60
F   0

Your grade is not an indication of how much I like you. It is not an indication of your worth as a person. It is my judgement of your accomplishment in learning computational physics.

Lateness Policy

It is important for you to stay with the pace of the course, completing exercises and projects by their due dates. A significant amount of out-of-class time will be required to finish the projects on schedule. I encourage you to look ahead on the schedule and feel free to read ahead and work ahead on projects. My advice is to try to finish things 24 hours before they are due. This way, if you hit a roadblock, it is still possible to get help. A penalty of 10% will be deducted for an assignment turned in late. For an assignment later than the beginning of the following class period, 30% will be deducted. For an assignment more than a week late, 50% will be deducted. No credit will be awarded for assignments more than two weeks late.

Academic Honesty

Being academically honest on the exercises and projects means writing your own code and submitting you own work. You may copy code from the textbook if it suits your purpose. Copying the code or work of others is an act of academic dishonesty and will be referred to the appropriate Dean. I strongly dislike the process of submitting evidence of academic dishonesty to the Dean. Please submit your own work.

When your code doesn't compile, it can be frustrating. Send me an email. Come to my office hours. I want to help you. Do not take the shortcut of borrowing someone else's code. That is academically dishonest and you will not learn from it.

Being academically honest on the exams means doing your own work without communicating or collaborating with other people. Helping others or getting help from others on an exam is an act of academic dishonesty and will be referred to the appropriate Dean. I strongly dislike the process of submitting evidence of academic dishonesty to the Dean. Please make each exam an individual effort.

You do not have to do anything special to be academically honest with class participation. It is impossible to be academically dishonest with class participation.

Plagiarism Detection Service

In this course, I may submit some or all of your assignments for review by an on-line plagiarism service, such as MOSS (Measure Of Software Similarity). This service will compare the content of your work to the content of your classmates' work. It is smart enough to realize when only variable names have been changed, or when lines of code have merely been reordered. Any work submitted to this service may become part of the service's permanent collection of submitted work. After your work is submitted, the service will generate an originality report which will be sent to your instructor. Any student who submits plagiarized work will be subject to the penalties outlined in LVC's Academic Honesty Policy found in the Student Handbook.

Make-up Work and Extra Credit Policy

Homework and exams can only be made up in the event of serious circumstances such as illness. There is no extra credit in this course.

Class Schedule

Date	Topic	Read before class	Due
01/15	Haskell installation party		
01/17	Haskell as a Calculator	Ch 1	
01/19	Functions	Ch 2	HW 1
—			
01/22	Types	Ch 3	HW 2
01/24	Describing Motion	Ch 4	HW 3
01/26	Lists	Ch 5	HW 4
—			
01/29	Lists		
01/31	Higher-order functions	Ch 6	HW 5
02/02	Higher-order functions		
—			
02/05	Higher-order functions		
02/07	Quick Plotting	Ch 7	HW 6
02/09	Type Classes	Ch 8	HW 7
—			
02/12	Tuples	Ch 9	
02/14	**Exam 1 (Chapters 1–7)**		
02/16	Type Constructors	Ch 9	HW 8
—			
02/19	Motion in Three Dimensions	Ch 10	HW 9
02/21	Motion in Three Dimensions		
02/23	Presentation Plotting	Ch 11	HW 10
—			
02/26	Presentation Plotting		
02/28	Stand-Alone Programs	Ch 12	HW 11
03/01	Animation	Ch 13	HW 12
—			

03/04	Spring vacation		
03/06	Spring vacation		
03/08	Spring vacation		
—			
03/11	Animation		
03/13	Newton's Second Law	Ch 14	HW 13
03/15	Newton's Second Law		
—			
03/18	**Exam 2 (Chapters 8–13)**		
03/20	Newton's Second Law		
03/22	Mechanics in One Dimension	Ch 15	HW 14
—			
03/25	Mechanics in One Dimension		
03/27	Mechanics in One Dimension		
03/29	Easter vacation		
—			
04/01	Easter vacation		
04/03	Mechanics in 3D, Theory	Ch 16	HW 15
04/05	Mechanics in 3D, Theory		
—			
04/08	Mechanics in 3D, Examples	Ch 17	HW 16
04/10	Mechanics in 3D, Examples		
04/12	Relativity	Ch 18	HW 17
—			
04/15	Relativity		
04/17	Interacting Particles	Ch 19	HW 18
04/19	Interacting Particles		
—			
04/22	**Exam 3 (Chapters 14–18)**		
04/24	Interacting Particles		
04/26	Dutchmen Day		
—			
04/29	Examples of Interacting Particles	Ch 20	HW 19
05/01	Examples of Interacting Particles		
05/03	What have we learned?		HW 20

Course Objectives Alignment to Program Goals and Assessment of Course Objectives

Program Goal	Course Objective	Assessment
Graduates from our program will have a working understanding and knowledge of fundamental areas in physics.	describe Newton's second law in the Haskell programming language	HW 14-17, 19, 20, Exam 3, Final Exam
	calculate quantities of physical interest using the computer	HW 14-17, 19, 20, Exam 3, Final Exam

Graduates from our program will have a working understanding and knowledge of mathematics along with computational skills necessary for advanced work in physics.	apply the Euler method to solve differential equations (Goal 2)	HW 14-17, 19, 20, Exam 3, Final Exam
	program a computer to solve physical problems using the Haskell programming language	HW 14-17, 19, 20, Exam 3, Final Exam
Graduates from our program will have effective written and verbal communication skills.	interpret Haskell code and explain what it does	HW 1-13, Exam 1, Exam 2
	explain how Newton's second law relates to the state of a mechanical system (Goals 1, 4)	HW 14-17, 19, 20, Exam 3, Final Exam

College-Wide Course Policies

RESPONDUS or EXAMSOFT POLICY

In this course, you may be asked to use a custom browser that locks down the testing environment within the Canvas learning management system. While using these programs, your instructor may require you to activate the video camera and microphone of your computer while completing the exam. Students who are not willing to provide the requested video and audio feeds may ask to take the exam using an alternative proctoring method. Students may arrange for the exam to be proctored at a professional testing center such as Sylvan Learning Centers. The student is responsible for finding the testing site and must pay any fees associated with testing. The Alternate Proctoring Request form can be obtained by contacting Kristen Shutter at `shutter@lvc.edu` or by phone at 717-867-6028.

EXPECTATIONS FOR STUDENTS IN FACE-TO-FACE CLASS SESSIONS

Students participating in face-to-face class sessions must adhere to the guidelines put forth in LVC's Community Covenant (`http://wordpress.lvc.edu/wordpress/lvcforward/2020/07/09/community-covenant/`). To facilitate contact tracing, students will be given assigned seats for the semester.

POLICY ON RECORDING CLASS SESSIONS

Audio and/or video recordings of the class sessions may be made by the College and/or by students who have been authorized by the LVC Center for Accessibility Resources to record classes as an accommodation for a disability. By participating in the class, all students consent to being recorded for these purposes. Any other recordings of class sessions are not permitted. Students participating in on-line courses are asked to respect the privacy of those participating in the class by ensuring that class sessions cannot be overheard by those who are not enrolled in the course.

Academic Honesty Policy

Any student who submits work that is in violation of the academic honesty policy will be subject to the penalties described in the College Catalog and outlined in LVC's Academic Honesty Policy. Lebanon Valley College expects its students to uphold the principles of academic honesty. Violations of these principles will not be tolerated. Students shall neither hinder nor unfairly assist the efforts of other students to complete their work. All individual work that a student produces and submits as a course assignment must be the student's own.

Cheating and plagiarism are violations of the academic honesty policy. Cheating is an act that deceives or defrauds. It includes, but is not limited to, looking at another's exam or quiz, using unauthorized materials during an exam or quiz, providing unauthorized material or assistance to another student, colluding on assignments without the permission or knowledge of the instructor, and furnishing false information to receive special consideration, such as postponement of an exam, essay, quiz, or deadline of an oral presentation.

Plagiarism is the act of submitting as one's own the work (e.g., the words, ideas, images, compositions, or other intellectual property) of another without accurate attribution. Plagiarism can manifest itself in various ways: it can arise from sloppy, inaccurate note-taking; it can emerge as the incomplete or incompetent citation of resources; it can take the form of presenting passages or work prepared by another as one's own, whether from an online, oral, or printed source. It may also take the form of re-using one's own previously submitted work (such as a paper written for a different class) without the current instructor's knowledge and permission.

A student is culpable for violations of the academic honesty policy, as outlined above, when caused by either academic negligence or academic dishonesty. An act of academic negligence is when a student engages in behaviors outlined above through irresponsible ignorance or carelessness. Acts of dishonesty involve the intent to deceive or mislead. Initially, the instructor will make the determination that a violation of the policy may have occurred.

Students who take part in violations as described above are subject to a meeting with the Associate Provost of Undergraduate Education, who has the authority to take further action, up to and including expulsion from the College.

UNICHECK POLICY

In this course, you may be asked to submit some or all of your assignments for review by LVC's online plagiarism service, Unicheck. This service will compare the content of your work to content found on the internet and several proprietary databases. Any work submitted to this service may become part of the service's permanent collection of submitted papers. After your work is submitted, the service will generate an originality report, which will be sent to your instructor. Any student who submits plagiarized work will be subject to the penalties outlined in LVC's Academic Honesty Policy found in the Student Handbook and the College Catalog.

END OF TERM COURSE EVALUATIONS

Most courses at the College utilize a course evaluation system called EvaluationKIT. Near the end of the term, you will have the opportunity to evaluate the course in a number of key areas: learning environment, instructor performance, overall course structure, progress on relevant course objectives, and Constellation learning outcomes (if they apply). The faculty have approved a set of common questions that students will respond using an agreement

scale. Please note that quantitative survey results and comments are used for course and instructor improvements and to indirectly measure the progress on relevant student learning objectives.

POLICIES REGARDING ACCESSIBILITY RESOURCES

Individuals with disabilities are guaranteed certain protections and rights of equal access to programs and activities under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Therefore, Lebanon Valley College recognizes the responsibility of the college community to provide equal educational access for otherwise qualified students with disabilities.

In-Person and Online Courses: Any student who needs accommodations is invited to provide letters from the Center for Accessibility Resources and discuss accommodations with me.

Any student who feels they may need accommodations based on a documented disability or other condition that may affect academic performance should: contact The Center for Accessibility Resources, located in the Lebegern Learning Commons — Mund Suite 002. Students may schedule an appointment by calling 717-867-6028 or emailing `hannafor@lvc.edu` to determine if accommodations are warranted and to obtain an official letter of accommodation.

Assistive Technology is available to enhance your academic skills. The Center for Accessibility Resources, located in the Lebegern Learning Commons—Mund Suite 002, offers educational software and personal assistive devices for short-term loans. Available assistive devices include LiveScribe pens, mini iPads, digital recorders, headphones, and adaptive keyboards. Our student coordinator is available to meet with students throughout the semester to suggest devices and/or software aligned to individual student needs.

If a student believes that appropriate accommodations are being denied, the student may file a grievance. Procedures for filing grievances may be found at `www.lvc.edu/offices-directories/center-for-accessibility-resources`.

STATEMENT ON INCLUSIVE EXCELLENCE

LVC is a community of inclusive excellence. We affirm the rights of all persons to a superior educational experience that is characterized by respect for others. As such, this class and all classes at LVC, are places where our core values of inclusiveness, civility and appreciation of difference are affirmed.

POLICY ON PREFERRED NAMES AND PRONOUNS

Lebanon Valley College is committed to fostering an environment of inclusion and support, which includes honoring all its members' forms of self-identification. This policy provides uses of preferred first names and pronouns for students, faculty, staff, friends, and alumni who wish to provide them. Many members of the LVC community may use names other than their legal names to identify themselves. If the use of this different name is not for

misrepresentation, LVC acknowledges that a preferred name may be used wherever possible. The preferred name will be recorded and used except where the legal name is required.

Although students, faculty, staff, friends, and alumni are free to determine the preferred name and pronoun they wish to be known by, the College deserves the right to deny a preferred name and pronoun if it is used inappropriately.

Gender pronouns are those pronouns that members of the community use to represent themselves. Gender pronouns can include, but are not limited to, he/him/his, she/her/hers, they/them/theirs, etc. Asking for and correctly using a person's pronoun is one of the most basic ways to show respect for a person's gender identity.

Preferred name and pronouns will be entered and accessible internally for members of the campus community. Lebanon Valley College expects all faculty, staff, and students to facilitate the use of preferred names and pronouns listed on the directory and class rosters.

TITLE IX STATEMENT

Lebanon Valley College prohibits discrimination on the basis of race, color, national origin, ancestry, religion/creed, sex, pregnancy, sexual orientation, gender identity or expression, age, disability, genetic information, marital/familial status, or veteran status in all programs and activities, as required by Title IX of the Educational Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and other applicable statutes and/or College policies. Lebanon Valley College prohibits discriminatory harassment and sexual harassment, including sexual violence and any type of sexual misconduct.

Title IX makes it clear that violence, harassment, and any type of sexual misconduct based on sex and gender are civil rights violations. If you or someone you know has experienced violence, discrimination, or harassment, support is available through Counseling Services, Health Service, the Chaplain's office, the Victim Advocacy Program, and Title IX deputies. Please refer to the Student Handbook or the College Catalog for specific contact information.

HYBRID AND ONLINE INSTRUCTIONAL EQUIVALENCIES

The faculty of Lebanon Valley College approved guidelines on Equivalent Instructional Activities that will be used to substitute for face-to-face contact hour requirements for this online or hybrid course. These activities are clearly documented in this syllabus. For further details, please review the approved Equivalent Instructional Activities.

Policy on Student Success and Intervention

- THE CENTER FOR ACADEMIC SUCCESS

  Starfish is an online tool used at LVC that gives you the opportunity to connect with faculty and staff to cultivate your success. Through Starfish, you can submit concerns,

access beneficial resources, connect with your Success Network, and receive updates on your academic progress. This tool also allows faculty and staff to recognize when you might need extra help and reach out to collaboratively resolve an issue. If you receive a Starfish Flag showing that someone has a concern, you will receive an email with a specific action plan to follow. Take that action and work with us to maximize your success.

- CARE Team

  At Lebanon Valley College, we want you to succeed in and out of the classroom. Administrators and faculty work together on the CARE Team to cultivate Confidence, Accountability, Resilience, and Engagement in every student. If a member of the LVC community is concerned about you for any reason (i.e. academic, social, or emotional issues), they will ask a CARE team member to reach out to you and work with you towards a solution. You should consider it your assignment to follow through and accept assistance from the appropriate source(s). Don't be afraid or hesitant to seek help from these individuals: supporting you is their job! Be proactive and take control of your success.

- The Center for Academic Success and Exploratory Majors

  Located in the lower-level of Mund College Center, the Center for Academic Success and Exploratory Majors serves to support, inspire, and cultivate student success. The key to performing well academically lies in frequently utilizing support services across campus; in fact, many of our top students utilize tutors to help prepare for exams, talk through challenging concepts, learn how to take effective notes, and more. For this reason, we staff peer tutors in almost all 100 and 200-level classes, including subject-specific writing conferencing. Students can request tutoring appointments through Starfish and the sessions serve as a place to connect with classmates, ask questions, and work on homework as well as drop-in writing support from 7pm-9pm, Mondays through Thursdays. If you would like to work with a tutor, please request a time using Starfish.

  In addition, the Center features academic success coaching, where staff members support students by designing and implementing a plan for academic success. These "coaching" sessions focus on developing effective time management, organizational, test-taking, critical reading, note-taking, and study skills, as well as learning healthy behavioral techniques like stress management and self-motivation. . For more information on any of these services, visit the Center for Academic Success. To request an appointment, please email `findyoursuccess@lvc.edu`.

  The Center also serves as the home on campus to Exploratory (undecided) majors. Professional staff advise students who are still determining their major/career path and support students who are in transition between majors as they determine their next steps.

STATEMENT ON SUPPORTING MENTAL HEALTH

Your mental health, including excessive stress, anxiety, depression or problems with eating and/or sleeping can adversely influence your academic performance. At LVC we care about the whole person. If you feel that any of these issues are negatively impacting your

performance, please contact our Counseling Services to consult with one of our professional counselors. During a brief phone conversation, they can assess your particular needs and help you make a connection to the services you may need. If you would like a phone consultation, just email `counselingservices@lvc.edu` and leave your contact information. A professional counselor will return your call or email the next business day. We will not check email after hours or over the weekend/vacation times. If you experience an emergency, please call 911 in your local area or text 741741 to request immediate assistance.

Notice of Non-Discrimination

Lebanon Valley College does not discriminate on the basis of race, color, national origin, ancestry, religion/creed, pregnancy, sexual orientation, gender identity or expression, age, disability, genetic information, or veteran status in its programs and activities as required by the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and other applicable statutes and/or College policies.

The following person has been designated to handle inquiries regarding the Americans with Disabilities Act, the Rehabilitation Act, Title VII, and related statutes and regulations: Ann C. Hayes, Senior Director of Human Resources and Title IX Coordinator, Administration Building/Humanities Center 108, Lebanon Valley College, 101 N. College Avenue, Annville, PA 17003–1400, 717–867–6416, hayes@lvc.edu.

Statement on the Use of Artificial Intelligence (AI)

Students should be aware that the work they submit must be their own. Professors may create assignments or activities that require or encourage the use of AI. If such use is not either required or allowed explicitly, then students must assume that the use of artificial intelligence is *not* acceptable in any given assignment. In this instance, unacknowledged uses of artificial intelligence in student work can be deemed violations of our academic honesty policy (see above). If this is unclear in any way, it is the student's responsibility to ask the professor about appropriate uses of AI for the assignment.

Religious Accommodations

Lebanon Valley College is committed to providing a welcoming and supportive environment for students from all cultural and religious backgrounds. All members of the community should commit to students not suffering adverse consequences for practicing their religions. We recognize the Christian centeredness of our campus, including our Academic Calendar. We seek to support an environment that is welcoming to persons of all faith traditions and backgrounds. Students whose religious practice requires that they observe holidays other than those specified on the Academic Calendar should have a conversation with either a faculty member or the Chaplain and Coordinator of Spiritual Life to initiate the accommodation process. This conversation should happen within the first two weeks (or first

week, if the course is a summer, winter, or graduate course meeting for less than 15 weeks) of each semester of their intent (even when the exact date of the day will not be known until later) so that alternative arrangements for both students and faculty can be made at the earliest opportunity. Any such conversation should seek to determine the needs of the student and the appropriate next steps. If the conversation starts through a faculty member, the faculty member should recommend that the student also have a conversation with the Chaplain so that the Chaplain may learn about the student's needs, attend to any non-academic requests, and refer the student to other impacted faculty. If the conversation starts with the Chaplain, the Chaplain will direct the student to also have a conversation with impacted faculty members.