

#### PHY 4371

## Course Syllabus



## Course Policies

## Course Objectives

To provide a detailed overview of the astrophysics of stars. Students will familiarize themselves with the equations of stellar structure. They will study energy generation and transfer in stars. They will also study the physics of stellar evolution in all stages from formation, to main sequence and helium burning stages, to death. Modern results will be discussed. Problem solving skill development will also be an attribute of the class.

### Method of Instruction

This course will utilize several different modes of instruction. The course will be organized primarily around Prialnik, but there will be weekly reading assignments for both textbooks. Presentations of the material of the course are provided before class to enhance assigned readings. Class time will deliver some of this material for expansion, questions and discussion. Homework assignments are assigned at the beginning of each unit of material, usually corresponding to one chapter of Prialnik. There will be one midterm and one final exam. The Research and Presentation project is a significant portion of the course. Each of these elements are described in more detail under Requirements of Assignment Groups below.

## Student Learning Outcomes

This course will include some application of basic integration, differentiation, and use of differential equations. Students will learn about the following topics: equations governing stellar structure; nuclear processes and relation to stellar lifecycle; and energy transport. Stellar evolution topics include: formation, hydrogen and helium burning phases, massive star late stages, and end stages.

### Statement on Communication

You may contact me via email using "PHY 4371" on the Subject line. I will respond to your question or email within 48 hours. Responses might be delayed on holidays and weekends. Assignments will be graded within 7 days of an assignment due date. My grading timeline might be delayed for exams and the presentation project.

### Statement on COVID-19 and Masks in Class

Masks are required in this course. This requirement is part of the participation/professionalism course component and obtains 10% of the total course grade. This masking requirement is subject to change during the semester, and any changes will be announced in class, posted clearly in Canvas, and updated in the syllabus.



## Netiquette

Netiquette is a set of rules for behaving properly online. Something about cyberspace makes it easy for people to forget that they are interacting with other real people. The following bullet points cover some basics to communicating online:

- Be sensitive to the fact that there will be cultural and linguistic backgrounds, as well as different political and religious beliefs, plus just differences in general.
- Use good taste when composing your responses in Discussion Forums. Swearing and
  profanity is also part of being sensitive to your classmates and should be avoided. Also
  consider that slang can be misunderstood or misinterpreted.
- Don't use all capital letters when composing your responses as this is considered "shouting" on the Internet and is regarded as impolite or aggressive. It can also be stressful on the eve

when trying to read your message.

- Be respectful of your others' views and opinions. Avoid "flaming" (publicly attacking or insulting) them as this can cause hurt feelings and decrease the chances of getting all different types of points of view.
- Be careful when using acronyms. If you use an acronym it is best to spell out its meaning first, then put the acronym in parentheses afterward, for example: Frequently Asked Questions (FAQs). After that you can use the acronym freely throughout your message.
- Use good grammar and spelling, and avoid using text messaging shortcuts.
- <u>Emoticons (http://www.merriam-webster.com/dictionary/emoticon)</u> and <u>emojis</u>
   (<u>https://en.oxforddictionaries.com/definition/emoji</u>) can be used to add emotion to your text or convey invisible body language, as long as they are used tastefully.
- For synchronous meetings, make sure you are in a safe and private place (please do not connect while you are driving or when there might be distractions around you). Also, for a better experience, make sure to use headphones and make sure you are not interrupted.



## Institutional Policies & Procedures

## Disability Accommodations

Students who need academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call <a href="http://www.smu.edu/Provost/SASP/DASS">214-768-1470</a> (tel:214-768-1470) or visit <a href="http://www.smu.edu/Provost/SASP/DASS">http://www.smu.edu/Provost/SASP/DASS</a>) to begin the process. Once they are registered and approved, students then submit a DASS Accommodation Letter through the electronic portal, <a href="https://www.smu.edu/Provost/SASP/DASS">DASS</a> Link, and then communicate directly with each of their instructors to make appropriate arrangements. Please note that accommodations are not retroactive, but rather require advance notice in order to implement.

### Sexual Harassment

All forms of sexual harassment, including sexual assault, dating violence, domestic violence and

stalking, are violations of SMU's Title IX Sexual Harassment Policy and may also violate Texas law. Students who wish to file a complaint or to receive more information about the grievance process may contact Samantha Thomas, SMU's Title IX Coordinator, at <a href="mailto:accessequity@smu.edu">accessequity@smu.edu</a> (mailto:accessequity@smu.edu) or <a href="mailto:214-768-3601">214-768-3601</a> (tel:214-768-3601). Please note that faculty and staff are mandatory reporters. If students notify faculty or staff of sexual harassment, they must report it to the Title IX Coordinator. For more information about sexual harassment, including resources available to assist students, please visit <a href="https://www.smu.edu/sexualmisconduct">www.smu.edu/sexualmisconduct</a> (http://www.smu.edu/sexualmisconduct).

### Pregnant or Parenting Students

Under Title IX, students who are pregnant or parenting may request academic adjustments by contacting Elsie Johnson (elsiej@smu.edu) in the Office of the Dean of Students, or by calling <a href="https://example.com/214-768-4564">214-768-4564</a> (tel:214-768-4564). Students seeking assistance must schedule an appointment with their professors as early as possible, present a letter from the Office of the Dean of Students, and make appropriate arrangements. Please note that academic adjustments are not retroactive and, when feasible, require advance notice to implement.

## Religious Observance

Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence (<a href="https://www.smu.edu/StudentAffairs/Chaplain/ReligiousHolidays">https://www.smu.edu/StudentAffairs/Chaplain/ReligiousHolidays</a>).

Affected quizzes or exams will be given prior to the rest of the class. No other make-up quizzes or exams will be granted.

### COVID-19 and Other Medical-Related Absences

Students who test positive for COVID-19 and need to isolate, or who are notified of potential exposure, must follow <a href="SMU's Contact Tracing Protocol">SMU's Contact Tracing Protocol</a>

(https://www.smu.edu/Coronavirus/Contact-Tracing). (https://www.smu.edu/Coronavirus/Contact-

<u>Tracing</u>) To ensure academic continuity and avoid any course penalties, students should follow the same procedures described by their instructors as they would for any other medical-related absence in order to be provided with appropriate modifications to assignments, deadlines, and exams.

## Excused Absences for University Extracurricular Activities

Students participating in an officially sanctioned, scheduled university extracurricular activity should be given the opportunity to make up class assignments or other graded assignments that were missed as a result of their participation. It is the responsibility of the student to make arrangements for make-up work with the instructor prior to any missed scheduled examinations or other missed assignments. (See <a href="2020-2021 SMU Undergraduate Catalog">2020-2021 SMU Undergraduate Catalog</a> (<a href="https://catalog.smu.edu/content.php?">https://catalog.smu.edu/content.php?</a>

<u>catoid=51&navoid=4645&hl=%22excused+absences%22&returnto=search)</u> under "Enrollment and Academic Records/Excused Absences.")

Affected quizzes or tests will be given prior to the rest of the class. No other make-up quizzes or tests will be granted.

## Student Academic Success Programs

Students needing assistance with writing assignments for SMU courses may schedule an appointment with the Writing Center through Canvas. Students who would like support for subject-specific tutoring or success strategies should contact SASP, Loyd All Sports Center, Suite 202; 214-768-3648 (tel:214-768-3648); https://www.smu.edu/sasp (https://www.smu.edu/sasp).

## Academic Dishonesty

Students are expected to embrace and uphold the **SMU Honor Code** 

(https://www.smu.edu/StudentAffairs/StudentLife/StudentHandbook/HonorCode). Violations of the Honor Code will be acted upon in accordance with the policies and procedures outlined in the Mustang Student Handbook

(https://www.smu.edu/StudentAffairs/StudentLife/StudentHandbook/) .



## Grading

Grades will be available through Canvas and students may access them to determine where they stand in this course at any time. Your grade will be calculated according to the "Assignments are weighted by group:" table displayed in this syllabus page. Please make sure to check your grade book to see your instructors feedback on your projects and activities. To see in-line feedback, go to the assignment, then click on View Feedback if applicable. It is your responsibility to check for your instructor's feedback and make appropriate improvements to assignments if necessary.

### **Grading Scale:**

A: > 90%

B: 80 - 89%

C: 70 - 79%

D: 60 - 69%

F: < 60%

In all cases, it is *crucial* to show your work to get credit for solutions to physics problems. Regrading requests must be well-justified in writing. The lowest homework and the lowest quiz grades will be omitted from the semester average grade.



Requirement/Description of Assignment Groups

Homework [20% of Grade]

Homework is the foundation of your effort to master the subject material of this course and acquire problem-solving skill in its utilization. Problems for PHYS 4371 will come from the Carroll & Ostlie textbook. You will solve problems in each area of the course leading up to stellar death and formation, working toward Learning Objectives 1 to 3. Remember to show your work. Homework will be due the class day after the completion of the material on the syllabus schedule. No late homework is accepted. The lowest homework grade will be dropped in the final course grade.

## Midterm Exam [15% of Grade]

The midterm exam provides a milestone for you to test your knowledge of the course material to that point, and your facility with that knowledge. This supports Learning Objectives 1 thru 3. Exams are closed book, and you may bring a single 8.5"x11" sheet with important equations and physical constants relevant for the material.

[Note on COVID/remote learning: During any time when the course is taught remotely, all exams will be proctored thru Zoom with Video ON for all students during the exam period.] When an exam is completed, the student will upload a multi-page PDF file of their work to the exam assignment in Canvas before the due time indicated.

## Research Project [50% of Grade]

The ability to communicate in scientific and dependent fields is a critical skill set. We will build on the material of the course by developing an individual research topic on a subject in variable star astronomy that goes beyond the material covered in class-time. These topics will support learning objectives 4-5. The project will center around the analysis of time domain astronomical data in order to identify and classify variable stars. During the first half of the course, students will learn about photometric measurements and the instrumentation that supports them. The second half of the semester is aimed at extracting physical parameters from candidate variables based on the measurements taken. Students will develop their project into a coherent research paper such as might be given in a professional setting. There will be roughly 10 intermediate assignments as you progress thru the project, corresponding to analysis stages or milestones in drafting your final Report, and comprising 25% of the course grade. The final report will total 50% of the course grade.

## Final Exam [15% of Grade]

The final exam allows a final assessment of your ability to satisfy learning objectives 1-3 of this course. Preparation for the final is intended to further learning. This exam is cumulative over the whole course. Exams are closed book, and you may bring a two sides of a 8.5"x11" sheet with important equations and physical constants relevant for the material.



## Course Outline/Calendar

For the full course Outline/Calendar, please visit the **Modules** section of the course.

Disclaimer: The instructor reserves the right to make changes to the schedule of the class. Any alterations will be announced in class, in Canvas or via email by the instructor. Students who do not check Canvas or their email assume full responsibility for missing alterations to the course.



## Tech Requirements & Help

Please be sure that your device or devices meet the **technical requirements** for Canvas. **Technical requirements** (https://community.canvaslms.com/docs/DOC-2059) and browser requirements (https://community.canvaslms.com/docs/DOC-1284) for Canvas are located in the **Canvas Student Guide** (https://community.canvaslms.com/docs/DOC-4121#jive\_content\_id\_Computer\_Specifications). If you need Technical Support with Canvas, click the Help link on the left side **Global Navigation** (https://community.canvaslms.com/docs/DOC-1281). From there you can Search Canvas Guides, Chat with Support, or Submit a Request for assistance. You can also contact the SMU **IT Help Desk** (http://www.smu.edu/OIT/Help) for assistance with Canvas.

To be successful in this course, students should have basic keyboarding and computer skills, and be comfortable navigating the Internet. This fully online course occurs primarily

and be connectable harigating the internet. The fair elimine course course printain,

via <u>canvas.smu.edu</u> (https://canvas.smu.edu/). <u>Zoom</u> (https://www.smu.edu/OIT/services/zoom)
Web Conferencing is used in this course as well for virtual (i.e., real-time, synchronous)
meetings, and <u>Panopto</u> (https://howtovideos.hosted.panopto.com/Panopto/Pages/Viewer.aspx?
id=816a7666-1ae3-49b0-957c-6455edee8554) is used for recording audio/video assignments. This course also uses the <u>Respondus LockDown Browser and Monitor</u>
(https://www.smu.edu/OIT/Services/LockDownBrowser) for online exams.

### IMPORTANT

A **webcam** is required for recording activities and taking exams. If your device does not have a built-in webcam, one can be purchased at a local consumer electronics store or through an online retailer like **Amazon** (https://www.amazon.com/s/ref=nb\_sb\_noss\_1?url=search-alias%3Daps&field-keywords=webcam).

#### TECHNICAL SUPPORT

If you run into any technical problems, there are a number of resources available to you. You can contact the <u>SMU IT Help Desk (http://www.smu.edu/OIT/Help)</u> for assistance with Canvas and Zoom. Otherwise, here are additional useful resources:

- <u>Canvas (https://community.canvaslms.com/docs/DOC-4121)</u>
  - Click Help & (http://help.instructure.com/) on the Global Navigation
     (https://community.canvaslms.com/docs/DOC-4121#jive\_content\_id\_Global\_Navigation) to
     search the Guides, Chat (https://cases.canvaslms.com/apex/liveagentchat) or contact
     Instructure Support via email or phone
- Panopto
  - Search the <u>Panopto Support site (https://support.panopto.com/s/)</u> (Links to an external site.) for forums and documentation, or contact the <u>SMU IT Help Desk.</u>
     (<a href="https://www.smu.edu/oit/help">https://www.smu.edu/oit/help</a>)
- Zoom
  - Search their <u>Knowledge Base (https://support.zoom.us/hc/en-us)</u> or <u>Submit a Request</u> (<a href="https://support.zoom.us/hc/en-us/articles/201362003-Zoom-Technical-Support">https://support.zoom.us/hc/en-us/articles/201362003-Zoom-Technical-Support</a>)
     (<a href="https://support.zoom.us/hc/en-us/articles/201362003-Zoom-Technical-Support">https://support.zoom.us/hc/en-us/articles/201362003-Zoom-Technical-Support</a>)

#### PANOPTO VIDEO APP for CANVAS

If requested, you will use the **Panopto** 

(https://support.panopto.com/s/topic/0TO390000003VN8GAM/getting-started) to submit video assignments. Be sure your device or devices meet the Panopto's technical requirements (https://support.panopto.com/s/article/System-Requirements), and if you need Panopto support contact the SMU IT Help Desk (https://www.smu.edu/OIT/Help).

### RESPONDUS LOCKDOWN BROWSER and MONITOR

This course might require the use of LockDown Browser and a webcam for online exams. The webcam can be built into your computer or can be the type that plugs in with a USB cable. Watch this <a href="mailto:short video">short video</a> (<a href="http://www.respondus.com/products/lockdown-browser/student-movie.shtml">http://www.respondus.com/products/lockdown-browser/student-movie.shtml</a>) to get a basic understanding of LockDown Browser and the webcam feature. A student <a href="Quick Start Guide">Quick Start Guide</a> (<a href="PDF">PDF</a>) (<a href="http://www.respondus.com/products/monitor/guides.shtml</a>) is also available.

Then download and install LockDown Browser from this link:

http://www.respondus.com/lockdown/download.php?id=951749825 (http://www.respondus.com/lockdown/download.php?id=951749825)

To ensure LockDown Browser and the webcam are set up properly, do the following:

- Start LockDown Browser, log in to <a href="http://canvas.smu.edu/">http://canvas.smu.edu/</a>), and select this course.
- Locate and select the **Help Center** button on the LockDown Browser toolbar.
- Run the Webcam Check and, if necessary, resolve any issues.
- Run the System & Network Check. If a problem is indicated, see if a solution is provided in the Knowledge Base. Troubleshooting information can also be emailed to our institution's help desk.

When taking an online exam that requires LockDown Browser and a webcam, remember the following guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers)
- Clear your desk of all external materials not permitted books, papers, other devices

- Remain at your computer for the duration of the test
- If the computer or networking environment is different than what was tested above, repeat the Webcam and System checks prior to starting the test
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims
  - Ensure your computer or tablet is on a firm surface (a desk or table) not on your lap, a bed, or other surfaces that might move
  - o If using a built-in webcam, avoid tilting the screen after the webcam setup is complete
  - Take the exam in a well-lit room and avoid backlighting, such as sitting with your back to a window
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted.

Additional resources related to Respondus LockDown Browser and Monitor, including a link to download the LockDown Browser iPad app, are located at <a href="https://www.smu.edu/OIT/Services/LockDownBrowser">https://www.smu.edu/OIT/Services/LockDownBrowser</a>. Respondus technical support is available either through the SMU <a href="https://www.smu.edu/OIT/Help">IT Help Desk (https://www.smu.edu/OIT/Help</a> or <a href="https://www.smu.edu/OIT/Help">Respondus</a> (<a href="https://support.respondus.com/support/index.php?/Default/Tickets/Submit/RenderForm/2">https://support.respondus.com/support/index.php?/Default/Tickets/Submit/RenderForm/2</a>).

### ZOOM

**Zoom** (https://www.smu.edu/OIT/Services/Zoom) will be used for online synchronous (i.e., real-time) meetings in this course. Please be sure your devices meet the technical requirements (https://support.zoom.us/hc/en-us/articles/201362023-System-Requirements-for-PC-Mac-and-Linux) for Zoom.

#### PRIVACY POLICIES

- Canvas by Instructure (https://www.canvaslms.com/policies/privacy)
- Panopto Privacy (https://www.panopto.com/privacy/)
- Respondus LockDown Browser (https://www.respondus.com/about/privacy.shtml)
- SMU OIT Policies and Legislation (https://www.smu.edu/OIT/Infosec/Policy)
- Zoom (https://zoom.us/privacy)

### **ACCESSIBILITY**

- Canvas
  - Accessibility within Canvas (https://community.canvaslms.com/docs/DOC-2061)
  - Voluntary Product Accessibility Template (https://www.canvaslms.com/accessibility)
- Panopto (https://support.panopto.com/s/article/Learn-About-Accessibility-Features)
- Respondus LockDown Browser (http://www.respondus.com/products/accessibility-lockdown.shtml)
- Zoom (https://zoom.us/accessibility)



### Student Services

The following services and resources are available to SMU students:

- <u>Altshuler Learning Enhancement Center (http://www.smu.edu/Provost/ALEC?utm\_medium=alias%20redirect&utm\_source=smu&utm\_campaign=%2Falec)</u>
  - ALEC offers study-skill workshops and can help you with learning strategies and test preparation. Their phone number is (214) 768-3648.
- Altshuler Writing Center (http://www.smu.edu/Provost/ALEC/WritingCenter)
  - The Altshuler Writing Center is open to all undergraduate students who need technical advice on their assigned papers. The writing center is open most afternoons and a few evenings. To work with someone at the writing center you must make an appointment in advance. To contact please call (214) 768-3648.
- DASS (https://www.smu.edu/Provost/ALEC/DASS)
  - Students needing academic accommodations for a disability must first contact <u>Disability</u>
     <u>Accommodations & Success Strategies (http://www.smu.edu/Provost/ALEC/DASS)</u>

     (DASS) at (214) 768-1470 to verify the disability and to establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See an attachment describes the DASS <u>procedures</u>
     <u>(https://www.smu.edu/Provost/SASP/DASS/DisabilityAccommodations/PoliciesandProcedures)</u>
     and relocated office.) If you have a disability accommodation you must contact DASS

and nave a letter of accommodation delivered to the instructor no later than the third day of class. You can email a scanned copy of your letter.

- my.SMU (https://my.smu.edu/)
  - Online portal for SMU students that allows you to view personal information, emergency contact information, register for AARO (if applicable), view class schedule, enroll in classes, add/drop/swap classes, view grades and view financial aid packages.
- <u>SMU Bookstore (http://smu.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?</u> <u>storeId=17551&catalogId=10001&langId=-1)</u>
  - Information on textbooks, events, buyback, promotions and more.
- SMU Bursar (http://www.smu.edu/EnrollmentServices/Bursar)
  - o Information on student finances, bill pay and more.
- <u>SMU Counseling Services (http://www.smu.edu/StudentAffairs/HealthCenter/Counseling)</u>
  - College can be a stressful time. There are many transitions and major life events occurring while you are a college student. If you or a friend is going through a difficult time and needs someone to talk to please seek out the resources provided by the counseling center, located in the Health Center and their phone number is (214) 768-2211. For 24 hour help contact (214) 768-2860.
- SMU Dedman Recreation Center (http://www.smu.edu/StudentAffairs/RecSports)
  - Regular exercise is one of the best things you can do for your mental and physical wellbeing.
- SMU Libraries (https://www.smu.edu/Libraries)
  - SMU Libraries has reference librarians happy to help with your research needs. Contact a librarian at <a href="http://askalibrarian.smu.edu/">http://askalibrarian.smu.edu/</a> (http://askalibrarian.smu.edu/) or call (214) 768-2326.
- SMU OIT (https://www.smu.edu/OIT)
  - OIT provides computing, information processing, and communications resources to satisfy the needs of faculty, students, and staff, and offers comprehensive support services to help them use technology effectively and creatively.
- SMU Student Affairs (http://www.smu.edu/studentaffairs)
  - SMU Student Affairs is a network of <u>departments</u>, <u>programs and services</u>
     (<a href="https://www.smu.edu/StudentAffairs/VPSA/Departments">https://www.smu.edu/StudentAffairs/VPSA/Departments</a>) focused on supporting students' out-of-classroom experiences and co-curricular learning.

# Course Summary:

Date	Details Due
Mon Jan 17, 2022	Reading: Prialnik 1.1-1.4, and Unit 1 Homework due by 5:30pm (https://smu.instructure.com/courses/97280/assignments/626070)
Tue Jan 18, 2022	Lecture: L1 Unit 1:  Observational Background due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626053)
Thu Jan 20, 2022	Lecture: L2 Unit 1:  Observational Background due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626054)
Fri Jan 21, 2022	Project: Overview due by 1pm (https://smu.instructure.com/courses/97280/assignments/626085)
Tue Jan 25, 2022	Lecture: L3 Unit 1:  Observational Background due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626055)
Thu Jan 27, 2022	Lecture: L4 Unit 1:  Observational Background due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626056)
Fri Jan 28, 2022	Project: Literature Research (https://smu.instructure.com/courses/97280/assignments/626087)
Mon Jan 31, 2022	Reading: Prialnik 2.1-2.8, and Unit 2 Homework (https://smu.instructure.com/courses/97280/assignments/626075)
Tue Feb 1, 2022	Lecture: L5 Unit 2: Equations of Stellar Evolution (https://smu.instructure.com/courses/97280/assignments/626058)
Thu Feb 3, 2022	Lecture 6: Unit 2 - Equations of Stellar Evolution (https://smu.instructure.com/courses/97280/assignments/626057)

Fri Feb 4, 2022	Project: Lightcurves (https://smu.instructure.com/courses/97280/assignments/626084)
Tue Feb 8, 2022	Lecture 7: Unit 2 - Equations of Stellar Evolution due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626046)
Thu Feb 10, 2022	Lecture 8: Unit 2 - Equations of Stellar Evolution due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626045)
Fri Feb 11, 2022	Project: Detection (https://smu.instructure.com/courses/97280/assignments/626082)
Mon Feb 14, 2022	Reading: Prialnik 3.1-3.7, and Unit 3 Homework due by 11:59am (https://smu.instructure.com/courses/97280/assignments/626077)
Tue Feb 15, 2022	Lecture 9: Unit 3 - Gas and  Radiation Inside Stars due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626059)
Thu Feb 17, 2022	Lecture 10: Unit 3 - Gas and  Radiation Inside Stars due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626060)
Mon Feb 21, 2022	Reading: Prialnik Ch. 4.1-4.10,  and Unit 4 Homework due by 11:59am (https://smu.instructure.com/courses/97280/assignments/626071)
Tue Feb 22, 2022	Lecture 11: Unit 4 - Nuclear  Processes due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626062)
Thu Feb 24, 2022	Lecture 12: Unit 4 - Nuclear  Processes due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626061)
Fri Feb 25, 2022	Project: Uses of Additional  Data  due by 2pm

(	<u> https://smu.instructure.com/co</u>	<u>ourses/97280/assignments/626079)</u>

	Reading: Prialnik Ch. 5.1-5.7,
Mon Feb 28, 2022	and Unit 5 Homework due by 11:59am
	(https://smu.instructure.com/courses/97280/assignments/626072)
	□> Lecture 13: Unit 5 -
T - M - 4 0000	Fauilibrium Stellar
Tue Mar 1, 2022	Configurations due by 3:30pm
	(https://smu.instructure.com/courses/97280/assignments/626063)
	□ Lecture 14: Unit 5 -
TI 14 0 0000	Fauilibrium Stellar
Thu Mar 3, 2022	Configurations due by 3:30pm
	(https://smu.instructure.com/courses/97280/assignments/629176)
	₽ Lecture 15: Unit 5 -
T 0 0000	Fauilibrium Stellar
Tue Mar 8, 2022	Configurations due by 3:30pm
	(https://smu.instructure.com/courses/97280/assignments/626064)
	P Lecture 16: Unit 5 -
Thu Mar 10, 2022	Equilibrium Stellar
	Configurations due by 3:30pm
	(https://smu.instructure.com/courses/97280/assignments/629178)
	Project: Extracting Physical
	Parameters due by 2pm
	(https://smu.instructure.com/courses/97280/assignments/626086)
Fri Mar 11, 2022	
	Midterm Exam - Spring 2022
	PHY 4371 due by 5pm
	(https://smu.instructure.com/courses/97280/assignments/626031)
	Reading: Prialnik Ch. 6.1-6.6,
Mon Mar 21, 2022	and Unit 6 Homework due by 11:59am
	(https://smu.instructure.com/courses/97280/assignments/626089)
	<b>₽ Lecture 17: Unit 6 - Stability</b>
Tue Mar 22, 2022	of Stars due by 3:30pm
	(https://smu.instructure.com/courses/97280/assignments/626065)

Thu Mar 24, 2022	Lecture 18: Unit 6 - Stability  of Stars  due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626066)
Fri Mar 25, 2022	Project: Report Guidelines (https://smu.instructure.com/courses/97280/assignments/626080)
Mon Mar 28, 2022	Reading: Prialnik Ch. 8.1-8.3,  and Unit 7 Homework due by 11:59am  (https://smu.instructure.com/courses/97280/assignments/626090)
Tue Mar 29, 2022	Lecture 19: Unit 7 - Evolution  of Hydrogen Burning Core due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626067)
Thu Mar 31, 2022	Lecture 20: Unit 7 - Evolution  of Hydrogen Burning Core (https://smu.instructure.com/courses/97280/assignments/626068)
Fri Apr 1, 2022	Project: Classification (https://smu.instructure.com/courses/97280/assignments/626078)
Mon Apr 4, 2022	Reading: Prialnik Ch. 8.4-8.8,  and Unit 8 Homework due by 11:59am  (https://smu.instructure.com/courses/97280/assignments/626091)
Tue Apr 5, 2022	Lecture 21: Unit 8 - Late  Evolution Stages due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626069)
Thu Apr 7, 2022	Lecture 22: Unit 8 - Late  Evolution Stages due by 3:30pm  (https://smu.instructure.com/courses/97280/assignments/626047)
Tue Apr 12, 2022	Lecture 23: Unit 8 - Late  Evolution Stages due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626048)

Thu Apr 14, 2022	Lecture 24: Unit 8 - Late  Evolution Stages (https://smu.instructure.com/courses/97280/assignments/626049)
Fri Apr 15, 2022	Project: Report Draft (https://smu.instructure.com/courses/97280/assignments/626083)
Mon Apr 18, 2022	Reading: Prialnik Ch. 8.9-8.10, 9.1-9.6, and Unit 9 Homework due by 11:59am (https://smu.instructure.com/courses/97280/assignments/626093)
Tue Apr 19, 2022	Lecture 25: Unit 9 - Evolution of Massive Stars due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626050)
Thu Apr 21, 2022	Lecture 26: Unit 9 - Evolution of Massive Stars due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626051)
Tue Apr 26, 2022	Lecture 27: Unit 9 - Evolution of Massive Stars due by 3:30pm (https://smu.instructure.com/courses/97280/assignments/626052)
Wed Apr 27, 2022	Reading: Prialnik 10.1 - 10.5,  and Unit 10 Homework due by 11:59am (https://smu.instructure.com/courses/97280/assignments/629233)
Thu Apr 28, 2022	Lecture 28: Unit 10 - Interstellar Medium and Star Formation (https://smu.instructure.com/courses/97280/assignments/629187)
Fri Apr 29, 2022	Project: Final Report (https://smu.instructure.com/courses/97280/assignments/626081)
Mon May 9, 2022	PHYS 4371 Final Exam due by 2:30pm (https://smu.instructure.com/courses/97280/assignments/626030)