PATHWAY TO SPACE ASEN 1969

SYLLABUS - SPRING 2018

WELCOME TO THE CU SPACE SHOW!

Welcome to Pathway to Space ASEN 1969, CU Boulder's first and only Space Show! Your host for the show is Chris Koehler: rocket-making, NASA-award-winning, out-of-this world, amazing space mastermind. Each class will feature a special guest, a renowned specialist in a field of space study. They will introduce you to an exciting aspect of space, its influence on our world, and will describe how you can play a role. We're excited for you to join the show!

ASEN 1969 is currently the only required course for the <u>Space Minor</u>. Contact the <u>Space Minor Program Manager</u>, Ashleigh Bailey at <u>Ashleigh.Bailey@Colorado.edu</u> with minor-related questions.

Instructor

Chris Koehler, pathway2space@gmail.com, Discovery Learning Center (DLC) 270A, 303-492-4750

Course Assistants (CAs)

Tessa Rundle, Jessica Benjamin, Lara Buri, Linnaea Eger, Marisa Exnicious, Matthew Finney, Joseph Frank, Corey Huffman, Julia Kincaid, Tyler Schulley, Hadley Tallackson

Course Goals (INFO VIDEO)

Pathway to Space will introduce you to various aspects of space and will then apply your learning to create connections with your own major field of study and interests. This will allow you to start shaping your future to further inform your career and illuminate your own pathway to space.

Throughout the course we will:

- Learn all about space and the active role CU and the State of Colorado plays in the space industry.
- Listen to stories to further connect with the course material.
- Discover alternative paths that professionals have taken and see how a career path meanders over the years.
- Create new and original interpretations of concepts from class and actively seek out Aha! moments.
- Envision your pathway to space and create your own ePortfolio.
- Have fun.

Course Schedule

See the course schedule for topics, learning goals, assignments, and all due dates and deadlines.

GUIDEBOOK (INFO VIDEO)

Each student enrolled in the course will receive their own *Pathway to Space* Guidebook. Use the Guidebook to record your observations and connections to the material in the classroom and outside. You will be able to refer to <u>your</u> Guidebook during the pop quizzes but not the final exam.



CLASS TIME, LOCATION, AND FORMAT

Tuesdays and Thursdays from 3:30 - 4:45 PM in Muenzinger E050.

This course has a unique talk show format to engage students and special guests with the content through interviews, visuals, performance art, and student involvement. Each class is divided into ~10 minute segments (see graphic or the breakdown of the class structure). Please have an open mind as you contribute to and participate in this course. We welcome your constructive feedback to inform future improvements.

PRIME DIRECTIVES (INFO VIDEO)

As in Star Trek, each member of Pathway to Space shall abide by the Prime Directives created with the intention of supporting each student's ability to learn and engage in class. Included in the Prime Directives is a challenge to each and every student to agree to a classroom that is "distraction-free" from phones, laptops, and tablets. Any student who requires a computer or another device for an accommodation is exempt from the first Prime Directive after presenting their accommodation form to Chris. A copy of the Prime Directives is in your Guidebook.

REQUIRED MATERIAL - CLICKER

CUClickers are used each day for attendance and to assist with your learning in the classroom. You must purchase one and bring it to class each day. There is no textbook for *Pathway to Space*.

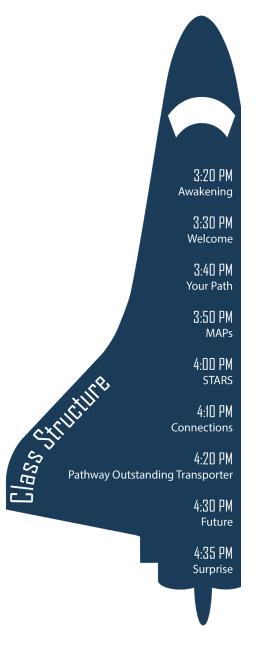
DESIRE 2 LEARN

All assignments and activities for this course are available on Desire2Learn (D2L) https://learn.colorado.edu/. Check D2L and your @colorado.edu email regularly for updates and reminders about deadlines and other course information.

GETTING HELP

If you have specific questions about the class:

- Review the syllabus, the schedule, class assignment descriptions, and D2L for the answers.
- Post to the general "Got a Question" D2L Discussion forum with course-related questions the entire class could benefit from hearing.
- Email pathway2space@gmail.com with "HELP" in the subject line so your email will get routed to the top of Chris's email inbox.
- Visit office hours Wednesdays 3-4 PM in the <u>Discovery Learning Center</u> (DLC) 270A or via Zoom by clicking https://cuboulder.zoom.us/j/573636518. Stay after class to chat with Chris or a Classroom Assistant if you have a quick question or need something clarified.
- Meet with a Classroom Assistant during their office hours (to be determined).
- Schedule an appointment with Chris if you can't make office hours.



ATTENDANCE POLICY

Attendance is required and will be tracked via Clickers. Clicker activity will be posted in D2L > Assessments > Grades on a regular basis. Any correspondence concerning attendance should be sent to pathway2space@gmail.com. If you have questions or concerns about the attendance policy, please come to office hours.

- If you are sick, please stay home and send an email stating that you are sick before class time in order to be
 excused. Emails about sick absences received 8 or more hours after the missed class will not be accepted. If you
 miss more than two days of class due to illness, a note from a medical provider is required for your absences to
 be excused. Include the medical provider's contact info in the note. Give this note to Chris or a Classroom
 Assistant on the first day you return to class.
- Absences related to official CU programs (athletics, clubs, marching band, ROTC, etc.) will be excused as long as
 you provide Chris a letter from that organization, including your name and class dates that will be missed, two
 weeks prior to the absence.
- If you miss an in-class quiz and your absence is excused, you may make up the quiz during office hours within one week of your return to class.
- Due dates for other assignments (e.g. Video Capsules, Reflection Reports, etc.) will be extended two days for
 each day of class that is excused as long as the assignment was due during the absence. There will be no
 extension of due dates for unexcused absences.
- Other absences (e.g. family emergency, jury duty, car accidents, etc.) will be excused on a case by case basis as long as we receive an email with sufficient information within 8 hours of the missed class.

COURSE COMPONENTS

ATTENDANCE/CLICKERS

Attendance is an important component of *Pathway to Space*. Since each day features a different special guest, it is important that each student is present and fully engaged. Attendance will be taken using Clickers so be sure to follow the instructions to register your Clicker the first week of class.

VIDEO CAPSULES (INFO VIDEO)

Pathway to Space is a flipped course, meaning that course content is provided through videos viewed outside of the classroom. Prior to each class, be sure to review the custom video lesson from our upcoming special faculty, industry, and government guests and complete the in-video quiz for credit. Access these videos in D2L > Content. We recommend you use either Chrome or Firefox to access the Video Capsules through D2L. The average video length is 20 minutes, but you will need additional time to complete the included quiz questions. The MAPs and STARS assignments are based on these Video Capsules. TIP: Plan ahead so you can review the Video Capsules in a quiet environment that allows you to pay close attention to the content.

Cosmos (INFO VIDEO)

Neil DeGrasse-Tyson's series, Cosmos: A Spacetime Odyssey, will provide additional context for the topics covered in the course. Watch the assigned 10 episodes and complete the in-video quiz for credit. Access each Cosmos episode in D2L > Content > Assignments. We recommend you use either Chrome or Firefox to access Cosmos.

PATHWAY TEAMS (INFO VIDEO)

All *Pathway* students are randomly assigned to a team of approximately 5 to 7 students each. In addition to completing the MAPs and STARS assignments together, each team is required to have a meal together (picture required - post on the D2L Discussion forum). View your team as a resource and support system for the class. We'd love to see your team pictures! Request permission from your teammates, then tag pictures on Instagram @pathway2space. Periodically we'll show student names in class to remind everyone who is on which team. Let us know via email if you prefer to use another name or gender pronoun.

MAPs - MATERIAL APPLICATION PERFORMANCES

The MAPs in-class activity is a time for your team to provide an original interpretation or elaboration of something of interest from the Video Capsule assigned for that day. See the <u>MAPs Guidelines</u> for additional information.

STARS - STUDENT TEAMS ASKING RENOWNED SPECIALISTS

The STARS in-class activity is a time for teams to gain a deeper understanding of the day's topic from your perspective by asking questions to our special guest. See the <u>STARS Guidelines</u> for additional information.

HOMEWORK AND POP QUIZZES (INFO VIDEO)

There are 4 to 5 structured homeworks throughout the semester. The first will get you up and running in the course, walk you through important to-dos, and clarify important components of the course. You can find all the homework in D2L > Content > Assignments > Homework.

Throughout the semester, 6 to 9 random, 10 minute pop quizzes will be done in class that will review material that has been covered to date in class. You will be able to use your *Pathway to Space* Guidebook on these assessments.

EVENT ATTENDANCE (INFO VIDEO)

Each student is required to participate in two space-related events outside of class to better enrich your connection with the material. After attending the event, answer the Post-Event questions (D2L > Content) and submit a document with your responses to the D2L Dropbox.

Pick a minimum of two space-related events to attend. See the <u>Space Minor Google Calendar</u> for events that we will accept. If you would like to attend another event for credit, let us know ahead of time. Anticipated events may include:

- Sci-Fi movie night and follow up discussion (stay tuned!)
- Take a friend to a Fiske Planetarium "Live Talk" (see calendar and student prices)
- Astronaut event (stay tuned!)
- Art/music show (stay tuned!)
- Space Minor Trivia bowl (stay tuned!)
- 2nd Annual Moonwalk at the Idea Forge April 21, 2018 from 7 to 9 PM
- VIP Visit (stay tuned!)

EPORTFOLIO (INFO VIDEO)

Over the semester, you will slowly build the components of an ePortfolio to show the world your "pathway to space." The ePortfolio is your platform to envision the future role you could play in space and how you plan to get there. The ePortfolio Guidelines contain additional information, but here is a summary of the various steps you'll complete as you build out the ePortfolio:

- Personalize ePortfolio template, Welcome message
- Resume, Vision Statement, Sample of Work
- Reflection Reports (3)
- Community Service Idea, Reflection and Photo (<u>Info Video</u>)
- Space Minor Program Manager Meeting and Reaction
- Career Counselor Meeting and Reaction

FINAL EXAM

There is a final exam for ASEN 1969, which is the only exam in the course. The final is multiple choice and includes content covered in class, the Video Capsules, and the Cosmos assignments. The final exam will take place Saturday, May 5, 2018 from 1:30 - 4:00 PM in Muenzinger E050.



GRADE BREAKDOWN AND ESTIMATED TIME COMMITMENT

The table below shows the grade breakdown for *Pathway to Space*. It also provides an estimate on the average number of hours required in and out of class. These time estimates are just that and will vary based on the individual. Campus has an expectation of 2-3 hours of outside work each week for each credit hour of a class (3 credit hour course equates to ~6 to 9 hours per week or ~90 to 135 hours per semester).

GRADE BREAKDOWN AND ESTIMATED TIME COMMITMENT (HOURS)				
Сомронент	% of G RADE	In CLASS	OUTSIDE CLASS	
Attendance/Clickers	20%	37.5	0	
Video Capsules	20%	0	15	
Cosmos	8%	0	8	
STARS and MAPs	8%	0.5	6	
Homework and Pop Quizzes	5%	2	4	
Event Attendance	4%	0	5	
Final Exam	5%	2.5	5	
ePortfolio	30%	0	15	
- Digication Welcome	2%	0	1	
- Vision Statement	1%	0	1	
- Sample of Work	4%	0	6	
- Reflection Reports (3)	6%	0	6	
- Community Service Activity	5%	0	5	
- Space/Career Meeting Reactions (2)	5%	0	4	
- Final ePortfolio & Resume	7%	0	8	
Total	100%	42.5 hrs	89 hrs	
Estimated per week (15 weeks)		2.8 hrs/wk	5.9 hrs/wk	

GRADING SCALE

Your grade will be calculated out of 100 points. Grades will regularly be posted in D2L, but your final/cumulative grade won't be released until the end of the semester.

Α	93-100%	С	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
В	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	0-59%

UNIVERSITY-WIDE SYLLABUS STATEMENTS

ACCOMMODATION FOR DISABILITIES

Pathway to Space uses a variety of technologies including Desire2Learn, Clickers, PlayPosit, and Digication. To help provide the best experience possible, we recommend using Chrome or Firefox when accessing course materials, completing Video Capsules or Cosmos videos, and creating your ePortfolio. We are happy to sit down with you and test out any course technologies or answer any questions.

If you qualify for accommodations because of a disability, please submit to Chris a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by email at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Injuries guidelines under the Quick Links at the Disability Services website and discuss your needs with Chris.

Religious Observances

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, if you have a religious obligation, please notify me via email of your schedule conflict at least two weeks before the obligation. See the campus policy regarding religious observances for full details.

CLASSROOM BEHAVIOR

Pathway to Space seeks to create a large lecture experience that is engaging and welcoming to all students from all majors. Given that this is an introductory class, it is important to remember that each student will have varying levels of knowledge related to each day's topic. Students, CAs, visiting guests and your course instructor each have the responsibility to maintain an appropriate learning environment. This environment is "self-governed" through the course Prime Directives, which are posted in the classroom and each student is given a copy on the first day of class. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. Chris will gladly honor your request to address you by an alternate name or gender pronoun. Please advise Chris of this preference early in the semester so that he may make appropriate changes to his records. For more information, see the policies on classroom behavior and the student code. For more information, see the policies on class behavior and the student code of conduct.

DISCRIMINATION AND HARASSMENT

The University of Colorado Boulder (CU Boulder) is committed to maintaining a positive learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CU's Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU Boulder's Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been subject to misconduct under either policy should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation can be found at the OIEC website.

HONOR CODE

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy of the institution. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to non-academic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at http://honorcode.colorado.edu.