



THE OHIO STATE UNIVERSITY

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# Autumn Course Scheduling

Astronomy & Astrophysics Majors

Physics Majors



David Zach, M.A.

(he/him pronouns)

Academic Advisor

Departments of Astronomy and Physics

[zach.11@osu.edu](mailto:zach.11@osu.edu)



## Agenda:

- Majors and Academic Advising
- Autumn 2020 Scheduling
- Next Steps
- Questions and Individual Consultations



# Majors and Academic Advising



## Department of Astronomy

B.S. in Astronomy & Astrophysics (or “Astro” major)

- Code: ASTRON-BS
- <https://astronomy.osu.edu/undergraduates/curriculum>

## Department of Physics

B.S. in Physics (or “Physics” or “ASC Physics” major)

- Code: PHYSICS-BS
- <https://physics.osu.edu/undergraduate-physics-program>

While the Physics major and the Astro major are housed in separate departments, our majors have a lot of overlap in classes, and we frequently work together!

**Note:** there is no major just called “Astrophysics”!



# Academic Advisors

Advisors your main source of non-course-content information at the University. They can help you with:

- Major and GE requirements and degree audits
- Scheduling information
- Exploring University resources and opportunities
- Developing short-term or long-term goals
- General information about research, internships, and employment
- ...and more!

Think of advisors as “connectors”. We may not always have the answer, but we can usually find you someone who does!



# Advising in Physics and Astronomy

David Zach ([zach.11@osu.edu](mailto:zach.11@osu.edu))

Academic Advisor

Departments of Astronomy and Physics

- Astronomy & Astrophysics majors (all 4 years)
- Physics majors (1st year only)
- Astronomy & Astrophysics/Physics double majors (all 4 years)



Lindsey Thaler ([thaler.21@osu.edu](mailto:thaler.21@osu.edu))

Director of Undergraduate Studies

Department of Physics

- Physics majors (2nd-4th years only)





# Autumn 2020 Scheduling





## Your Autumn schedule will consist of around 4-6 classes, aiming for 15-16 total hours:

1. Survey course (1 cr.)
2. Math course (4-5 cr.)
3. Science sequence: Physics course (5 cr.) or GE (3-4 cr.)
4. GE course (3-5 cr.)
5. [Astro majors only] Astro seminar (1 cr.)
6. [Optional] Elective course (0.5-2 cr.)

We'll talk about each of these options a little more in-depth. Get out your AU20 Schedule Worksheet from the final page of the ASC MPS Orientation course in Canvas so that we can work on completing it together.



# 1. Survey Course (1 cr.)

ALL incoming students will take a 1-credit Survey course in their first semester to help introduce you to university, college, and major policies and resources. Generally, your academic advisor teaches this course.

You all *must* take a section that is team-taught for Astro, Pre-CIS, Pre-Data Analytics, Physics, and Statistics majors.

In Schedule Planner, add the course **Arts and Sciences (ARTSSCI) 1100.10**. Then go into the “Options” for the course and uncheck all the sections *except* for the ones with 5-6 listed instructors. (David Zach is one of them.)



## 2. Math Course (4-5 cr.)

The Math class you take will depend on either your Math Placement score or on any transfer credit or on scores you have earned (or expect to earn) on AP or IB exams.

If you:

- Did not take any AP or IB exams in calculus, OR
- Expect to earn a score of 1-2 on your AP Calc AB or BC exam, OR
- Expect to earn a score of 1-3 on your IB Math exam

Then, your class will be based on your Placement score:

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| • L* - <b>Math 1151</b> (5 cr.) | R - <b>Math 1075</b> (4 cr.)        |
| • M - <b>Math 1150</b> (5 cr.)  | S - <b>Math 1075</b> or <b>1050</b> |
| • N – <b>Math 1148</b> (4 cr.)  | T - <b>Math 1050</b> (5 cr.)        |

\*If your L score is 13-16, then attend a Calculus Advising Session to discuss taking Math 1140 vs. Math 1151. Fill out the survey **by 4:00pm.**<sup>11</sup>



## 2. Math Course (4-5 cr.)

If you:

- Earned a score of 3-4 on the AP Calculus AB exam, OR
- Earned a score of 4-5 on the IB Math exam

Then, we *recommend* that you begin in **Math 1151** Calculus I (5 cr.)

If you:

- Earned a score of 5 on the AP Calculus AB exam, OR
- Earned a score of 3 on the AP Calculus BC exam

Then, we *recommend* that you begin in **Math 1152** Calculus II (5 cr.)

If you:

- Earned a score of 4-5 on the AP Calculus BC exam, OR
- Earned a score of 6-7 on the IB Math exam

Then, we *recommend* that attend a Calculus Advising Session to discuss. You may be recommended to begin in Math 1152 (5 cr.), 2153 (4 cr.), 1181H (5 cr.) or 4181H (5 cr.). Fill out the survey **by 4:00pm.**



### 3. Physics Course (5 cr.) or GE (3-4 cr.)

The calculus-based introductory Physics sequence (Physics 1250-1251) is required for all Astro and Physics majors. Math 1151 (Calc I) is a co- or prerequisite for Physics 1250.

Most first-semester Astro and Physics students will begin in **Physics 1250** (5 cr.), with a few exceptions:

- If you are beginning in Math 1150 or below, then you will not take a Physics course in your first semester. You'll pick a GE instead
- If you have incoming credit for Physics 1250 (e.g., through the Physics C: Mechanics AP exam) *and* are beginning in Math 1152 or higher, then you have three options:
  - Begin in **Physics 1250** to review
  - Begin in the second course, **Physics 1251**
  - Begin in the Honors Physics sequence with **Physics 1250H\***



### 3. Physics Course (5 cr.) or GE (3-4 cr.)

\*Physics 1250H is a fast-paced version of Physics 1250, designed for students who already have significant background in calculus and physics and are looking for a challenge. Physics 1250H also introduces special relativity.

You *may* be permitted to take Physics 1250H after a discussion with an advisor at the end of this presentation. We will look for students who are:

- beginning in Math 1152 or higher *and* have AP credit for Physics 1200 or Physics 1250 (Physics 1 or Physics C: Mechanics exam)
- beginning in Math 1151 but believe you have a significant background in calculus and physics that was not demonstrated through exam scores (e.g., because your HS did not offer AP, etc.)

Please mention your interest during our one-on-one meeting today.

Note: most Astro and Physics majors *do not* take 1250H/1251H.



## 4. GE course (3-5 cr.)

You may pick any unfulfilled GE from any category here. However, we recommend your **Foreign Language GE**.

All students must complete *through* course 1103 of a foreign language by completing a sequence 1101-1102-1103 or 1155-1103. Depending on your placement score, this may require 3, 2, 1, or 0 courses in total.

Since Foreign Language is one of the only GE categories that requires sequencing, we recommend starting on it early, even if you are beginning in a new language. If you are continuing a language from high school, we recommend it to avoid a long break between courses.

All Foreign Language GEs are 4 credits, with the exception of Latin: Latin 1101 and 1102 are 5 credits each and Latin 1103 is 3 credits.



## 4. GE course (3-5 cr.)

You may pick any unfulfilled GE from any category here. However, we recommend your **Foreign Language GE**.

However, there are some good reasons why you may *not* pick a Foreign Language GE for this course. You may consider something else if:

- You are fluent in a language other than English (you will receive more information on validating your language requirement later)
  - If English is also not your Native language, you may be required to take EDUTL 1901 and/or 1902 first. If so, we recommend this.
- Your language placement score placed you beyond course 1103
- You are interested in a specific course to help explore a possible minor, major, or keen interest

Additionally, **all students** should have at least two backup courses chosen for their GE (due to possible time conflicts, etc.)





## 4. GE course (3-5 cr.)

Additionally, **all students** should have at least two backup courses chosen for their GE (due to time conflicts, etc.)

When looking for a GE other than Foreign Language:

1. Search for course titles that interest you in the Open Course List you received in an email this morning from Brenda Dinan (dinan.9)
2. Choose anywhere from 2-5 interesting courses and mark them down on your AU20 Schedule Worksheet. Be sure to choose courses across at least 2 different GE requirements
3. Fill out the second page of your AU20 Schedule Worksheet with any AP, IB, CCP, or transfer credit you have earned/are expecting to earn. (This will help us to ensure you do not take any unnecessary GEs.)

We will chat about which requirements you will already have fulfilled, but you can also look at the full GE list for B.S. degrees here:

<https://artsandsciences.osu.edu/academics/current-students/advising/ge>



## 5. [Astro Majors Only] Astro Seminar (1 cr.)

All Astro majors will take a 1-credit seminar to help introduce you to professors and possible research opportunities in the Department of Astronomy. In Schedule Planner, add the course **Astronomy (ASTRON) 2895**.

Physics majors *do not* take this course, but they will take a similar course (Physics 2095) later on, usually in your second year.



## 6. [Optional] Elective course (0.5-2 cr.)

You may choose to round out your schedule with an elective course from one of the following optional categories:

- First-Year Seminar course (**Arts and Sciences 1137.xx** or **1138.xx**): <https://firstyearseminars.osu.edu/current-seminars>
- Instrumental or Vocal Music Ensemble course: <https://music.osu.edu/ensembles>
- Dance course: <https://dance.osu.edu/undergrad/elective>
- Physical Education (Kinesiology: Sport Fitness and Health/**KNSFHP 1xxx**) course: <https://sfhp.ehe.osu.edu/>
- Polaris Mentoring Program course (**Physics 2050.01**, 1 cr.)
- If you are in a Scholars program or ROTC, your required course

Remember that you should be aiming to stay at 15-16 total credits. Under certain circumstances, 17 credits may also be acceptable.



# Students for diversity and equity in STEM

## **Mission:**

- To foster a more diverse, equitable, inclusive, and accessible undergraduate experience in physics and astronomy

## **Polaris Mentoring Program (PHYSICS 2050.01):**

- Be matched with a graduate or upper-level undergraduate mentor based on your academic interests
- Receive personal guidance on courses, research and career opportunities, and college life
- Learn about diversity and inclusion in STEM
- Complete an introductory research project with your mentor

**Contact us:** [osupolaris@osu.edu](mailto:osupolaris@osu.edu)

**More info:** <https://physics.osu.edu/Polaris>

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# Next Steps



## Next Steps (Homework)

Before your Day 2 meeting tomorrow, please complete the following items:

1. **Sign up** for a Calculus Advising Session by 4:00pm today, if recommended during the Math course discussion:  
[https://osu.az1.qualtrics.com/jfe/form/SV\\_da0GwpbinVPR1Qh](https://osu.az1.qualtrics.com/jfe/form/SV_da0GwpbinVPR1Qh)
2. **Review** the ASC MPS Orientation course: <https://carmen.osu.edu>  
(Complete the checklist on the final page.)
3. If you did *not* complete the Pre-Orientation Survey by yesterday, then please **email** me at [zach.11@osu.edu](mailto:zach.11@osu.edu) with the following:
  - a) A list of AP/IB exams you took and scores (or an estimate).
  - b) A list of all the CCP coursework you have completed. Include the institution awarding the credit (not your high school), the department and course number, and your grade.
  - c) List any double majors or minors you plan to pursue, if any.
4. **Access** Schedule Planner and “favorite” 1-4 of your favorite schedules. (Instructions can be found in the Carmen course.)



## Next Steps (Now)

If you have any questions that are applicable to the whole group, please ask them now. (You can unmute yourself and ask the question or type the question in to the chat.)

Then, I will put each of you in your own individual “breakout room”. An advisor will come around to each room to answer your individual questions and discuss your ideas for your Autumn schedule.

You have all been assigned an individual, 20-minute appointment with me for tomorrow where we will finalize your choices and get you officially enrolled in courses.