

Department of Astronomy
4055 McPherson Laboratory
140 W 18th Avenue
Columbus, OH 43210

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astronomy.osu.edu

December 17, 2025

College of Arts and Sciences Curriculum Committee
186 University Hall
230 North Oval Mall
Columbus, Ohio 43210

To whom it may concern:

The Department of Astronomy is proposing the following changes to the Astronomy and Astrophysics minor. These changes will update the minor, bring it into compliance, and reflect the revisions and additions to the existing course offerings.

The following are a list of changes made:

- 1) Incidental changes/updates to font, formatting, college-approved boilerplate, and contact information.
- 2) Clearly outline the minimum prerequisite coursework required for students to complete the minor courses.
 - a. We added new courses to the minor sheet that have always been prerequisites for the minor. These courses were always pre-requisites for required courses within the minor but have never been on the advising sheet before.
 - b. Prerequisite courses are now fully listed to aid students/advisors in degree planning and course sequencing.
- 3) New computer programming prerequisite in response to the revisions of the prerequisites for Astronomy 3350 that were approved last academic year.
 - a. Since Astronomy 3350 is required for the minor, the prerequisites for the minor itself need to reflect the prerequisites for the course.

Current Production Studio Areas and Courses

Revised Production Studio Areas and Courses

Required Area 1: Animation

- ACCAD 5001 Animation Techniques and Practices
- ACCAD 5002 3D Computer Animation: Form, Light, Motion I
- ACCAD 5003 3D Computer Animation: Form, Light, Motion II
- ACCAD 5194.01 Group Studies

Required Area 2: Documentary

- THEATRE 5341 Studies in Documentary
- THEATRE 5343 Advanced Non-Fiction Production

Required Area 3: Experimental

- ART 4009 Film/Video II: Experimental Strategies
- ART 5009 Film/Video III: Topics in Technologies and Strategies

622 Film .9ART (5) 19 Film/Video (15) (es) To in 4. The 3.5 () p(s)-3.4 ((es)-6 (n2)) Tw () Tj i5 (es)- Strategies

Required Ar2>> Film/Video (15) (es) To in 4. The 3.5 () p(s)-3.4 ((es)-6 (n2)) Tw () Tj i5 (es)- Strategies

**The Ohio State University
College of Arts and Sciences**

Astronomy & Astrophysics Minor

Department of Astronomy, 4055 McPherson Lab, 140 West 18th Avenue, Columbus, OH 43210-1340;
614-292-1773 <https://astronomy.osu.edu>

Astronomy and Astrophysics is the study of planets, stars, and galaxies, and the universe as a whole, including how these originate and how they evolve in time. The principal pursuits of the astronomer are to extend our understanding of the physical nature of the universe and to convey this understanding to students and the general public.

The minor in Astronomy & Astrophysics requires a minimum of 12 credit hours in required courses and additional courses drawn from either Astronomy or Physics. All students must take Astronomy 2291, 2292, and 3350. One additional course is also required.

Once the Director of Undergraduate Studies in the Department of Astronomy has approved the Minor Program Form, you should file the form with your college or school counselor. For further information about the minor program, contact the Department of Astronomy.

Required courses

Astronomy 2291, 2292, 3350

Additional courses (at least 3 credit hours are required)

Astronomy 5681, 5682
Physics 2300, 3470

A student majoring in Physics could not use Physics 2300 toward the Astronomy & Astrophysics minor because that course is required for the Physics major. A Physics major could instead take one of the three other options listed under additional courses.

**Some courses in this minor have prerequisites. Please consult the course bulletin before enrolling in courses. For example, all three required courses have Math 1151, 1152 (or equivalent), and Physics 1250, 1251 as prerequisites.*

Astronomy and Astrophysics minor program guidelines

Required for graduation No

Credit hours required A minimum of 12 credit hrs. 1000 level courses shall not be counted in the minor.

Transfer and EM credit hours allowed A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with the GE A student is permitted to overlap up to 6 credit hours between the GE and the minor.

Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

Grades required

- Minimum C- for a course to be counted toward the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of course graded Satisfactory/Unsatisfactory may count toward the minor

X193 credits No more than 3 credit hours.

Minor approval The minor course work must be approved by the Director of Undergraduate Studies in the Department of Astronomy.

Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by the Director of Undergraduate Studies in the Department of Astronomy

College of Arts and Sciences
Curriculum and Assessment Services
154 Denney Hall, 164 W. 17th Ave.
<http://artsandsciences.osu.edu>

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BV 7-7-14
BV 7-21-15
DH 6-9-21

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Academic Advisor: David Zach.

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The minor in Astronomy & Astrophysics requires a minimum of 12 credit hours drawn from Astronomy and Physics.

Note: Some courses in this minor have additional prerequisites beyond those listed for the minor program. Please consult the course bulletin before enrolling.

Prerequisite Courses (4-6 courses, 17-28 CH)

The Astronomy and Astrophysics minor requires prerequisites in three areas: mathematics, physics, and computer programming.

- MATH 1140 ~~-and-~~ 1141 ~~-and-~~ 1152 or 1172
~~-or-~~
MATH 1151 ~~-and-~~ 1152 or 1172
~~-or-~~
MATH 1156 ~~-and-~~ 1152 or 1172
or
MATH 1161.01 ~~-and-~~ 2162.01 or 1172
~~-or-~~
MATH 1181H
~~-or-~~
MATH 4181H

- PHYSICS 1250(H), 1260, or 1270
~~-and-~~
PHYSICS 1251(H), 1261, or 1271

- CSE 1222, CSE 1223, CSE, 1224, ASTRON 1221, ENGR 1221,
~~-or-~~ ENGR 1281.xxH

Required Courses (3 courses, 10 CH)

- ASTRON 2291 – Basic Astrophysics & Planetary Astronomy (3)
- ASTRON 2292 – Stellar, Galactic, & Extragalactic Astronomy & Astrophysics (3)
- ASTRON 3350 – Methods of Astronomical Observation & Data Analysis (4)

Elective Courses (1-2 courses, 2-4 CH)

Choose one of the following:

- ASTRON 3810 – Order of Magnitude Astronomy (1)
- ASTRON 4810 – Advanced Order of Magnitude (1)
- ASTRON 5205 – Planetary Science (3)
- ASTRON 5550 – Advanced Astronomical Data Analysis (3)
- ASTRON 5681 – Principles of Stellar Evolution & Nucleosynthesis (3)
- ASTRON 5682 – Introduction to Cosmology (3)
- PHYSICS 2300 – Intermediate Mechanics I (4)
- PHYSICS 3470 – Optics (3)

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X193 credits No more than 3 credit hours.

Declaring the minor

In order to declare the minor, students must meet with David Zach, Academic Advisor, prior to the filing of the graduation application. Please visit the Department of Astronomy's [advising website](#) to make an appointment.

Approval of Coursework

Initial approval of the minor coursework:

Students who complete the minor following the guidelines on this sheet need only verify with their academic advisor that the minor appears complete on the degree auditing system. No approval from the Department of Astronomy is required.

Approval for courses not listed on this form to apply to the minor program:

Students must obtain the approval of the Department of Astronomy to apply courses not listed on this form toward the Astronomy and Astrophysics minor. Please email Wayne Schlingman.4 to request approval.

College of Arts and Sciences
Curriculum and Assessment Services
306 Dulles Hall, 230 Annie and John Glenn Ave.
<http://artsandsciences.osu.edu>

DH 6-9-21B
Updated 07-08-2025 RLS

Commented [RS1]: These courses have always been prerequisites for the minor (because they are pre-requisites for required courses within the minor) but have never been on the advising sheet before. They are listed now to aid students/advisors in degree planning and course sequencing.

Commented [RS2]: New prerequisite, added in response to the revision of Astronomy 3350.

Commented [RS3]: Formerly 9 CH; changed to 10 to align with the revision of Astronomy 3350, which is now a 4CH course rather than a 3 CH course.

Commented [RS4]: New elective options

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~~-or-~~

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~~-or-~~

MATH 1181H

~~-or-~~

MATH 4181H

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