

# 2018–19 Physics–Astronomy Academic Map

## Department of Physics and Astronomy

### Middle Tennessee State University • Murfreesboro



An academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Milestones, courses, and special requirements necessary for timely progress to complete a major are designated to keep you on track to graduate in four years. **Missing milestones could delay your program.**

**This map is not a substitute for academic advisement—contact your advisor if you have any questions about scheduling or about your degree requirements.** Also see the current undergraduate catalog ([catalog.mtsu.edu](http://catalog.mtsu.edu)) for a complete list of requirements and electives. *Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.*

**You may choose to attend a summer term to reduce your load during fall or spring terms but still stay on track to graduate in four years (see back). NOTE: Learning Support courses will alter the sequences on this map.**

## Suggested Fall/Spring Four-Year Schedule

| FRESHMAN FALL                         |           |  | FRESHMAN SPRING                            |           |                                     |
|---------------------------------------|-----------|--|--|-----------|-------------------------------------|
| Course                                | Hours     | Milestones/Notes   | Course                                     | Hours     | Milestones/Notes                    |
| ENGL 1010 (Comm)                      | 3         |  | ENGL 1020 (Comm)                           | 3         | Prereq: ENGL 1010 with C-           |
| MATH 1910 (Math)                      | 4         | Take MATH 1730 first if weak background in Math; may take MATH 1910 with acceptable Math ACT score (26). | MATH 1920                                  | 4         | Prereq: MATH 1910 with C or better  |
| CHEM 1110/1111 (Nat Sci)              | 4         | Prereq: High School chemistry  | CHEM 1120/1121                             | 4         | Prereq: CHEM 1110 with C- or better |
| Nat Sci                               | 4         | PHYS 2010/2011 or PHYS 2110/2111 recommended; consult with advisor                                       | PHYS 2020/2021 or PHYS 2120/2121           | 4         | Consult with advisor                |
| PHYS 1010                             | 1         |  |  |           |                                     |
| <b>SUBTOTAL</b>                       | <b>16</b> |  | <b>SUBTOTAL</b>                            | <b>15</b> |                                     |
| SOPHOMORE FALL                        |           |  | SOPHOMORE SPRING                           |           |                                     |
| PHYS 3100 (OR PHYS 3070)              | 3         | Consult with advisor   | ENGL 2020, ENGL 2030, or HUM 2610 (Hum/FA) | 3         | Prereq: ENGL 1010, ENGL 1020        |
| PHYS 3150 (OR MATH 3120)              | 3         | Consult with advisor   | PHYS 3110 (OR PHYS 3080)                   | 3         | Consult with advisor                |
| COMM 2200 (Comm)                      | 3         |  | PHYS 3111                                  | 1         | Prereq: PHYS 3100 or PHYS 3070      |
| Elective                              | 3         | Consult with advisor   | Elective                                   | 3         | Consult with advisor                |
| Elective                              | 3         | Consult with advisor   | ASTR 2030 (OR ASTR 2040)                   | 3         | Consult with advisor                |
| <b>SUBTOTAL</b>                       | <b>15</b> |  | <b>SUBTOTAL</b>                            | <b>13</b> |                                     |
| JUNIOR FALL                           |           |  | JUNIOR SPRING                              |           |                                     |
| ASTR 3400 (OR elective)               | 3         | Consult with advisor   | ASTR 2040 (OR ASTR 2030)                   | 3         | Consult with advisor                |
| PHYS 3610 (OR PHYS 3510 OR PHYS 3400) | 3         | Consult with advisor   | PHYS 3900                                  | 1         | Prereq: PHYS 3110 or PHYS 3080      |
| Hum/FA (Rubric 1)                     | 3         |  | Hum/FA (Rubric 2)                          | 3         |                                     |
| Soc/Beh Sci (Rubric 1)                | 3         |  | Soc/Beh Sci (Rubric 2)                     | 3         |                                     |
| Elective                              | 3         | Consult with advisor   | Elective                                   | 3         | Consult with advisor                |
| ASTR 1031 (OR ASTR 3401)              | 1         | Consult with advisor   | Elective                                   | 3         | Consult with advisor                |
| <b>SUBTOTAL</b>                       | <b>16</b> |  | <b>SUBTOTAL</b>                            | <b>16</b> |                                     |
| SENIOR FALL                           |           |  | SENIOR SPRING                              |           |                                     |
| ASTR 3401 (OR ASTR 1031)              | 1         | Consult with advisor   | PHYS 3800                                  | 1         | Prereq: PHYS 3110 or PHYS 3080      |
| ASTR 4850                             | 2         | Prereq: Consent of instructor  | ASTR 4900                                  | 2         | Prereq: ASTR 4850                   |
| HIST 2010, HIST 2020, or HIST 2030    | 3         |  | HIST 2010, HIST 2020, or HIST 2030         | 3         |                                     |
| Elective (OR ASTR 3400)               | 3         | Consult with advisor   | Elective                                   | 3         | Consult with advisor                |
| Elective                              | 3         | Consult with advisor   | Elective                                   | 3         | Consult with advisor                |
| Elective                              | 3         | Consult with advisor   | Elective                                   | 2         | Consult with advisor                |
| <b>SUBTOTAL</b>                       | <b>15</b> |  | <b>SUBTOTAL</b>                            | <b>14</b> |                                     |
| <b>TOTAL HOURS IN PROGRAM: 120</b>    |           |  |  |           |                                     |

# Physics–Astronomy Suggested Fall/Spring/Summer Four-Year Schedule

Refer to [www.mtsu.edu/financial-aid/scholarships](http://www.mtsu.edu/financial-aid/scholarships) for information regarding use of the Lottery Scholarship for the summer term.

| FRESHMAN FALL                              |           |  | FRESHMAN SPRING                    |           |                                     |
|--|-----------|--|------------------------------------|-----------|-------------------------------------|
| Course                                     | Hours     | Milestones/Notes   | Course                             | Hours     | Milestones/Notes                    |
| ENGL 1010 (Comm)                           | 3         |  | ENGL 1020 (Comm)                   | 3         | Prereq: ENGL 1010 with C-           |
| CHEM 1110/1111 (Nat Sci)                   | 4         | Prereq: High School chemistry  | COMM 2200 (Comm)                   | 3         |                                     |
| Nat Sci                                    | 4         | PHYS 2010/2011 or PHYS 2110/2111 recommended; consult with advisor                                       | CHEM 1120/1121                     | 4         | Prereq: CHEM 1110 with C- or better |
| MATH 1910 (Math)                           | 4         | Take MATH 1730 first if weak background in Math; may take MATH 1910 with acceptable Math ACT score (26). | PHYS 2020/2021 or PHYS 2120/2121   | 4         | Consult with advisor                |
| PHYS 1010                                  | 1         |  |                                    |           |                                     |
| <b>SUBTOTAL</b>                            | <b>16</b> |  | <b>SUBTOTAL</b>                    | <b>14</b> |                                     |
| FRESHMAN SUMMER                            |           |  |                                    |           |                                     |
| ENGL 2020, ENGL 2030, or HUM 2610 (Hum/FA) | 3         | Prereq: ENGL 1010, ENGL 1020   | MATH 1920                          | 4         | Prereq: MATH 1910 with C or better  |
| <b>SUBTOTAL</b>                            | <b>3</b>  |  | <b>SUBTOTAL</b>                    | <b>4</b>  |                                     |
| SOPHOMORE FALL                             |           |  | SOPHOMORE SPRING                   |           |                                     |
| PHYS 3100 (OR PHYS 3070)                   | 3         | Consult with advisor   | PHYS 3110 (OR PHYS 3080)           | 3         | Consult with advisor                |
| PHYS 3150 (or MATH 3120)                   | 3         |  | PHYS 3111                          | 1         | Prereq: PHYS 3100 or PHYS 3070      |
| Elective                                   | 3         | Consult with advisor   | Elective                           | 3         | Consult with advisor                |
| Elective                                   | 3         | Consult with advisor   | ASTR 2030 (OR ASTR 2040)           | 3         | Consult with advisor                |
| Soc/Beh Sci (Rubric 1)                     | 3         |  | Hum/FA (Rubric 1)                  | 3         |                                     |
| <b>SUBTOTAL</b>                            | <b>15</b> |  | <b>SUBTOTAL</b>                    | <b>13</b> |                                     |
| JUNIOR FALL                                |           |  | JUNIOR SPRING                      |           |                                     |
| ASTR 3400 (OR elective)                    | 3         | Consult with advisor   | ASTR 2040 (OR ASTR 2030)           | 3         | Consult with advisor                |
| PHYS 3610 (OR PHYS 3510 OR PHYS 3400)      | 3         | Consult with advisor   | PHYS 3900                          | 1         | Prereq: PHYS 3110 or PHYS 3080      |
| Hum/FA (Rubric 2)                          | 3         |  | Soc/Beh Sci (Rubric 2)             | 3         |                                     |
| Elective                                   | 3         | Consult with advisor   | Elective                           | 3         | Consult with advisor                |
| ASTR 1031 (OR ASTR 3401)                   | 1         | Consult with advisor   | Elective                           | 2         | Consult with advisor                |
| <b>SUBTOTAL</b>                            | <b>13</b> |  | <b>SUBTOTAL</b>                    | <b>12</b> |                                     |
| JUNIOR SUMMER                              |           |  |                                    |           |                                     |
| HIST 2010, HIST 2020, or HIST 2030         | 3         |  | HIST 2010, HIST 2020, or HIST 2030 | 3         |                                     |
| <b>SUBTOTAL</b>                            | <b>3</b>  |  | <b>SUBTOTAL</b>                    | <b>3</b>  |                                     |
| SENIOR FALL                                |           |  | SENIOR SPRING                      |           |                                     |
| ASTR 3401 (OR ASTR 1031)                   | 1         | Consult with advisor   | PHYS 3800                          | 1         | Prereq: PHYS 3110 or PHYS 3080      |
| ASTR 4850                                  | 2         | Prereq: Consent of instructor  | ASTR 4900                          | 2         | Prereq: ASTR 4850                   |
| Elective (OR ASTR 3400)                    | 3         | Consult with advisor   | Elective                           | 3         | Consult with advisor                |
| Elective                                   | 3         | Consult with advisor   | Elective                           | 3         | Consult with advisor                |
| Elective                                   | 3         | Consult with advisor   | Elective                           | 3         | Consult with advisor                |
| <b>SUBTOTAL</b>                            | <b>12</b> |  | <b>SUBTOTAL</b>                    | <b>12</b> |                                     |
| TOTAL HOURS IN PROGRAM: 120                |           |  |                                    |           |                                     |