



GENERAL DESCRIPTION

Astronomy is one of the seven ancient liberal arts, and as such it is a key part of a classical education. Arithmetic is the study of the one-dimensional number line, geometry considers the two-dimensional Euclidean plane, and astronomy explores the interaction of matter in three dimensions. Additionally, astronomy is considered by many to be the pinnacle of all physical sciences—combining chemistry, geometry, physics, and cosmology. A primary goal of the course is to prepare a student to encounter theology, considered throughout history as the chief of sciences.

COURSE PURPOSE

The course is designed to create interest in astronomy by touching on many facets of the subject. We cover a variety of topics: the history and development of astronomical thought through key historical figures, chemistry (spectroscopy), the star of Bethlehem as a historical event, and the varying positions of celestial objects over the course of the year. We also touch on some of the modern twists in the field: space-time, black holes, time travel, string theory, and an investigation of modern scientific philosophy. A student can also look forward to some time under the vast night sky of West Texas, identifying constellations and understanding the workings of a telescope.

One goal of the class is that students will be inspired to be amateur astronomers for a lifetime. The subject matter is a perfect setting to gain some perspective about the vast expanse of the universe, the relative smallness of man, and the inadequacy of language to describe the gap between the two. Ultimately, the subject can lead a student to encounter the majesty and mystery of the cosmos' Creator. A fair portion of the class periods are used as a time to explore the philosophical influences of science, with the goal of providing the students a taste of how to defend their faith as they head into a potentially hostile university setting. Some tough questions are raised, many of which are left unanswered. Students are encouraged to pursue Truth no matter where the answers take them, with the awareness that knowledge is always passed through the filters of our biases. The ultimate hope is that students will clearly see the importance of God's revelation to man through creation, His revealed word, and the person of Christ.

COURSE REQUIREMENTS

It will be expected of each student to be fully prepared for each class meeting. This will be accomplished by reading the assigned sections and doing all of the assigned homework. Such assignments will generally be given at the previous meeting of the class. If a student is not present at a class to receive an assignment, it is the student's responsibility to get the assignment, either from the tutor or another student. The expectation of a fully completed assignment at the beginning of class will also include those students that have missed the previous class(es).

SUPPLIES

Also consult Grade Level Supply List.

Please bring at least 4 of the following **each day**.

1. Notebook paper
2. Writing utensil
3. Bible
4. A humble and teachable attitude
5. 25-inch (or bigger) Dobsonian telescope with motor drive and star finding capabilities

GRADING

A student's grade can be broken down as follows:

- | | |
|----------------------|-----|
| ▪ Contribution Grade | 30% |
| ▪ Homework/Tests | 70% |

MCA utilizes a web-based grading program, *FACTS Family Portal*, which provides a valuable tool for both parents and students to get timely feedback on a student's standing in his or her classes. There, details can be found about current grades, absences, tardiness, participation, assignments given/received, and also some brief descriptions of a student's conduct in class. As such, parents are strongly encouraged to use *FACTS Family Portal* on a regular basis as a way of keeping up with your child's progress and to communicate with the tutor frequently via email, phone, or office visit in the event of any questions or confusion. An "OS" will be given in the Note section to indicate a student's original score. "EC" will be given to indicate any extra credit points the student earned on the assignment.

CONTRIBUTION GRADES

Contribution Grades primarily assesses four areas: a student's **preparation** for class, his **attitude** towards learning, his **contribution** towards learning during class-time, and his level of **engagement** during the class conversation.

A student's **respectfulness** towards God, his tutor, and peers is a prerequisite for a good Contribution Grade.

Daily Contribution grades will be given for every hour of class. Typically, students are expected to earn 10 points per hour, but the tutor may adjust these values to better reflect the nature of the class time. Daily Contribution grades are not revisable.

Additional Contribution Grades such as Grammar Quizzes, Engagement Notes, etc. may be assigned as needed. All additional Contribution Grades are revisable for 70% of the original value, unless the tutor specifies otherwise.

REVISIONS

Through revisions, a student can earn back 70% of the points lost on an assignment and may do revisions twice to regain all of the possible points. However, students are strongly encouraged to maintain awareness of revision deadlines (given in syllabus—typically four weeks), after which point revisions will not be accepted. Revisions are due by the end of the school day on the posted date. If an assignment is handed in late, the points deducted for being late are not revisable.

LATE ASSIGNMENT POLICY

Assignments are due at the beginning of class, after which point they are considered "late." Until a late assignment is turned in, it is entered into the grade book as "missing." If the late assignment is handed in

anytime during the following 7 days, 10% will be deducted, 20% for the following 7 days, and so on, until the 4-week deadline has taken effect. None of these late points can be recovered by revisions. After 4 weeks, an assignment will permanently remain in the grade book as “missing.”

TARDY POLICY

Class will begin precisely at the scheduled time. A student arriving late to class will be required to go to the upper school front desk to obtain a tardy slip from one of the administrators. The first tardy in a given week ensures that a student cannot earn a participation grade higher than 7 out of 10 on that day of class. A student with two tardies in one week cannot earn a participation grade higher than 5 out of 10.

COMMUNICATION

At MCA, we promote an open-door environment between tutors, students, and parents. Students are encouraged to initiate contact with their tutors when they need help on a concept or just a listening ear. My office hours will be posted on my office door, and students are welcome to drop by or schedule an appointment. Students are also welcome to text me or call me on my mobile number if the need arises. Parents are also encouraged to contact me in the same manner.

EXTRA CREDIT

As this is a senior-level class, the tutor expects students to be responsible for their learning. Occasionally the tutor will offer a small amount of extra credit to the whole class, and the only requirement for earning these points is completing the assignment to the tutor's satisfaction. There are some more lengthy assignments that are available for extra credit, but a student is only able to access these assignments once they have completed all revisions and late work from the previous two months of class. Any revisions beyond the deadline stated above will receive no credit.

Extra credit opportunities will be available throughout the school year, but most of them are assigned and only available for a limited time. Students are encouraged to take advantage of these opportunities as they come along, as there are very few available as the end of the school year approaches.

TURNITIN POLICY

Turnitin is an internet-based service and tool that promotes academic integrity and original thought from students. Turnitin screens for similarity (plagiarism) and detects unauthorized A.I. usage in writing.

To better ensure academic integrity and original thought, tutors may ask students to either submit their classwork through Turnitin directly or to email them a digital copy of their classwork, for the tutor to upload through Turnitin screenings.

Tutors may use the feedback Turnitin provides to help them make a more informed determination about the integrity and originality of the student's work.

MCA Schoolwide Policies

MCA ATTENDANCE POLICY

Absence: Parents must inform the school if their student will be absent for any reason. Call the Front Office or email upperschoolnurse@mcaknights.org prior to the absence or on the morning of the absence. If a student is absent without prior notification by a parent, the school will call the parent to determine the validity of the absence. Call the office, 432-694-0995, or email upperschoolnurse@mcaknights.org.

In the event an Upper School student is absent for more than one-fourth (1/4) of the class sessions during a semester, the student's parents must meet with the tutor and Head Administrator to determine whether the student will receive credit for the class. Additional and/or make-up work may be required.

Tardy Policy: Tardies will be marked at the discretion of the individual tutors. Students or parents should contact the individual tutors to report reasons for tardies as soon as possible.

Missed Assignment Due Date Guidelines: In the event of an absence, a due date extension will be given. The extension will not exceed the number of school days missed during the absence. Due dates will be established by the class tutor. Students must complete all work assigned during their absence. However, the tutors may, at their discretion, excuse the students from any portion of the assignments missed. Students will receive full credit for submitting assigned work. Note: It is the **student's responsibility** to find out what work was assigned. In the case of extended illness, it is recommended that the student or parents contact the tutors directly to find out what assignments were or will be missed.

MCA HONESTY POLICY

All students are assumed to be exhibiting the godly fruit of self-control. We anticipate working with students who are characterized by joy, honesty, and diligence. For this reason, upon enrollment, we require that each student affirm that he or she will maintain the highest standards of honesty and behavior in all work done for Midland Classical Academy. All students will be asked to sign the following.

Pledge of Academic Honesty

I have read and understand the Midland Classical Academy Code of Conduct. I pledge my honor, with God as my witness, to commit myself to the practice and preservation of these standards of academic honesty as long as I am a student of the academy.

As such, the following actions are considered serious violations of our Honesty Policy.

- 1. Directly copying someone else's work visually, orally, electronically, or otherwise.*
- 2. Use of disallowed devices on assignments such as notes, smartphones, books, etc.*
- 3. Getting test questions or essential information from another student who has already completed an assignment that will later be taken, such as a test or quiz.*
- 4. Any other activity that the tutor has explicitly described as cheating.*

MCA MASTERY WITH HONORS (MH)

Midland Classical Academy offers honors credit, referred to as "Mastery with Honor", but we offer no "honors" classes.

Mastery with Honor credit for a class is given to those students who

- receive a minimum grade of 92.5 at the end of each semester
- receive a minimum participation grade of 85 at the end of each semester
- demonstrate character befitting an honor student (1 Corinthians 10:31)
- complete a tutor-approved, 20+ hour project that advances the student's knowledge or skills in the subject while serving either the school or the community in some capacity.

As a student fulfills these requirements in a class at MCA, they receive a Mastery with Honor designated by an "MH" for the class. Mastery with Honor applications and a nominal fee are due at the end of October. The projects themselves are due at the end of March with two scheduled checkpoints in between the application and final deadline.

ARTIFICIAL INTELLIGENCE (A.I.) POLICY

Artificial Intelligence programs are tools that can be used beneficially or harmfully. To the extent that MCA uses these A.I. tools, we desire to use them and instruct our students to use them beneficially. It requires the classical virtue of "Wisdom" to discern the difference between what is beneficial and what is harmful.

Among MCA's core values is "Engaging Minds". Everything we do, including our use of A.I. needs to be in harmony with this value and to cultivate within students the skill of being able to "think for themselves".

MCA offers the following principles for tutors & students to follow as they navigate A.I. in their academic domains. MCA tutors will create and clearly communicate their own instructions for A.I. usage in their classrooms and for their assignments. Students should practice integrity, honesty, and humility in their use of A.I. as in all their work.

Principle 1: *Why to use A.I.* - A.I. should only be used by a student to equip them to better understand the material and to learn in a way that facilitates their critical thinking skills.

Principle 2: *When to use A.I.* - Tutors will explicitly and clearly communicate which assignments a student may or may not use A.I. tools to assist in their learning.

Principle 3: *How to use A.I.* - Tutors will explicitly and clearly communicate the method in which it is acceptable and not acceptable for the student to use A.I. tools.