

EMPHASIS IN SCIENCE

Appropriate for:

Students pursuing a career in the areas of Biology, Physics, Chemistry, Astronomy. These can include a Biochemist, Biophysicist, Engineer, Environmental Scientist, Chemist, Conservationist, Zoologist, Ecologist, Protection Technician, Forensic Scientist, Geoscientist, or Hydrologist.

UPDATED EDITION



EMPHASIS & HONORS OVERVIEW

Graduating with an Emphasis Cord shows a dedication to a specific subject matter; receiving an Honors Medallion shows application and experience of the gained knowledge. Both can open doors to opportunities with employers and universities! Customizable options are available upon request.

APPLICATION PROCESS:

- 1. Plan high school classes with criteria of desired cord.
- 2. Document completed coursework on Quest's online application form (<u>click here</u>) then save progress to be updated year after year. Planning and documentation can begin any time during high school, but students are encouraged to begin in their freshman year.
- 3. Once a student has documented and included all necessary information, the form is to be submitted by the announced deadline to be reviewed.

GENERAL CRITERIA:

- Students must maintain a 3.5 GPA in classes qualifying for the particular emphasis cord
- Students must maintain a 3.5 GPA overall in all high school classes for the honors medallion.
- The student must display honorable character and a clean disciplinary record.

Application does not guarantee that the student will receive the cord, but students are likely to be eligible for multiple cords and may apply for up to three. This number does not include any Social Cords they may receive for Honor Society, Student Council, or the Community Connection Chord.

SCIENCE CORD REQUIREMENTS

COURSE REQUIREMENT

- Completion of 6 science classes with at least one class in each of the four categories through all 4 years of high school
- Two must be honors classes or dual credit courses. **IMPORTANT:** Quest offers Honors Contracts to elevate any high school course to an honors class.
- OPTIONAL: Complete an AP exam with a 4 or 5 (before senior year) in substitution for one of the 6 science classes.

CHEMISTRY

- Chemistry
- Organic Ćhemistry
- Inorganic Chemistry

PHYSICS

- Physics
- Advanced Physics -Independent Study

BIOLOGY

2

3

4

- General Biology
- Medical Biology

• Entomology

ELECTIVES

• Psychology

- Marine Biology
- Planetary & Astronomy
- Ecology & Environmental

• Engineering - High School

- Zoology
- Nutrition

TECHNICAL WRITING REQUIREMENT

- Provide 10 high school level lab reports with a 90% or higher, with original final grades attached. These can be turned into the office in a binder or
- scanned and uploaded on the online form.

CREDIBILITY REQUIREMENT

- Provide a transcript & Schoology grade report (instructions to download this are on the form). If coursework has been done outside of Quest, provide proof for class completion/grades (report card, scores email, teacher's signature).

ONE ADDITIONAL REQUIREMENT (CHOOSE 1)

- Serve as a TA in any elementary high school science course, for an entire year.
- OR Interview two professionals in a sciencebased field. Compile a paper discussing the job's pros and cons. (What problems have they faced? Career longevity?).

HONORS MEDALLION REQUIREMENTS

Honors Medallions are earned through practical application and experience. **Customizable options are available upon** request for students who need accommodations.

ELIGIBILITY

- Students must be pursuing the science emphasis cord and must maintain a 3.5 GPA average in high school.
- Unlike the emphasis cord, a medallion requires prior approval of the student's plan for this honor. Approval must be received prior to starting any apprenticeship, internship, practicum, or senior project.
- Students must complete the approved plan before graduation.

APPLICATION PROCESS

- 1. Choose a minimum of 2 medallion options below and enter them in the online form (*click here*) to be approved.
- 2. After receiving approval, document your progress on the emphasis cord application form.

MEDALLION OPTIONS (MINIMUM OF 2)

- Completion of at least 30 hours of tutoring in the sciences.
- Completion of a semester-long apprenticeship in a scientific laboratory with a letter of recommendation from a mentor upon completion.
- Becoming a student instructor in a science course during their senior year under the guidance of a senior instructor. Students must complete a designated number of instruction hours as predetermined by the student and instructor.
- Publication of a scientific article in a reputable scientific journal.
- Completion of an ongoing advanced research project for at least two years. The project must either result in publication or be presented at three juried events, such as a science fair or medical conference.
- Participation in state-level or higher science competitions with two projects for different years.
- Completion of at least 2 shadowing experiences in various scientific fields with written summary of the experience.

The options listed are not all-inclusive. If you wish to apply yourself in other ways, include those when you submit your proposed plan.

WHERE AND WHEN DO I BEGIN?

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Begin preparation *before your freshman year* or as early as possible. Your first step is to make an Aspire appointment, then to read all instructions on <u>the online form.</u>

2 I HAVE BEGUN LATE IN THE GAME. HOW SHOULD I PROCEED?



Set up an <u>Aspire appointment</u> to see what cords you qualify for, or should work towards. Then, begin documenting all your current high school progress on <u>the online form</u>. You'll receive feedback by submitting it for review.

2 WHERE CAN I FIND COURSES TO SATISFY THE REQUIREMENTS?

Quest courses or private lessons are the best way to fulfill this academic journey! Other programs may also apply, such as Science and Engineering at <u>JTED</u>, <u>Pima College</u>, Writing in the Sciences at <u>Coursera</u>, Nutrition Science- edX at edX, <u>Modern States</u>, or <u>KHAN Academy</u>.

Q HOW DO I DOCUMENT WORK COMPLETED OUTSIDE QUEST?

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As outside programs offer courses that could qualify towards emphasis cords or medallions, students can ask for approval for outside classes. They must describe and submit their past or current progress for review on <u>the</u> <u>online form</u>. The credibility of scores must be provided in some way; this may be a report card, proof of completion email, or signature from a teacher or advisor.



HOW DO THESE ACALADES APPLY TO MY FUTURE?

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Emphasis Cords and Medallions are helpful in applying for scholarships and getting into honors collages and groups. They also help you to excel in particular fields.

Q I NEED THESE HONORS BEFORE I APPLY TO COLLEGE AS A JUNIOR!

If you are applying to collages in your junior year and want these honors on your transcript before graduation, please work with our Student & Parent Life Coordinator. Coursework can be completed and reviewed anytime during your high school year.

WHO CAN I TALK TO ABOUT CUSTOMIZABLE OPTIONS?

Set up an advising meeting with our Student & Parent Life Coordinator. She will walk you through options we offer all our students and the best path to your individual success.



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WHAT ARE HONORS CONTRACTS AND HOW DO I GET AND USE ONE?

Individual Honors Contracts are available to all students to elevate any of Quest's high school courses to an honors class. Emphasis Cords require two honors (or dual credit) courses to be completed. Honors Contracts allow students to meet these requirements if a class is not already listed as AP/honors. "The art and science of asking questions is the source of all knowledge."

Thomas Berger