**STEM e-portfolio & Distinguished STEM Graduate Requirements**

**What is an e-portfolio?**

Over the course of your four years in the Harrison STEM program, you will be required to keep a STEM e-portfolio. Each year there are minimum requirements that will be included as part of your grade in your STEM courses. So what is an e-portfolio?

Initially you may think an e-portfolio sounds like a digital collection of artifacts, but it is much more than that. A good e-portfolio is both a product (a digital collection of artifacts) and a process (of reflecting on those artifacts and what they represent). Therefore your academic e-portfolio will be a collection of your course-related work, like essays, posters, labs, photographs, videos, and artwork as well as a snapshot of other aspects of your student life, such as volunteer experiences, employment history, extracurricular activities, and more. In other words, the e-portfolio documents and makes visible ALL of your student learning.

**Distinguished STEM Graduate**

If you wish to be considered for recognition as a STEM Distinguished Graduate and wear a STEM stole at graduation, you must meet the following additional requirements:

* Your e-portfolio must include the minimum additional grade level OPTIONS requirements which have been approved and signed off by a STEM advisor at that grade level.
* You must have a minimum **CUMULATIVE 3.5 GPA.**

**STEM e-portfolio Definitions**

**Regular meetings with your STEM advisor(s)**

* STEM Advisor is defined as any current STEM related content teacher you have during an academic semester. ***IF*** you have a semester with no STEM specific course or have questions regarding summer opportunities, your STEM advisor contact will be the STEM coordinator, Ms. Allard.
* **Continued** communication with your STEM advisor(s) is key to success.
* You must show that your e-portfolio has been updated **throughout** your time at HHS.
* You also must meet all posted deadlines for your portfolio.
* You must maintain records of checklists to turn in with your e-portfolio.
* If you **choose** not to communicate with your STEM advisor(s), you **will not receive a STEM stole**.

**STEMinars**

* Each semester HHS will host “STEMinars” (seminars) featuring a variety of guest speakers ranging among STEM professionals, college representatives, alumni, and other community members.

**Community Connections**

* You are required to seek input from outside professionals who are willing to share their expertise in their various fields. This **would not include** those individuals who present at STEMinars **unless** you coordinate additional contact hours with them.
* Include pictures of your attendance as well as a reflection.

**Outstanding Projects**

* Include pictures and a reflection of **your best project examples**.
* We encourage you to post all projects to your e-portfolio so that you can edit for the best later.

**Resume Boosters**

* Include pictures and a reflection
* Extracurricular activities include Work Experience, Clubs, Sports, etc.
* These activities must be approved by your advisor before putting them in your e-portfolio.

**Job Shadowing**

* Gain experience by shadowing a professional in the field you are interested in exploring. The experience must be approved by a STEM advisor before including it in your e-portfolio.
* Include pictures and a reflection, in addition to a documentation form
	+ You must have official documentation forms signed (either from STEM or other official forms). If using other documentation--dates, hours, and supervisor’s signature must be clear.
* We encourage you not to miss school for shadowing unless it is an experience offered through HHS.
* Your parents or the school should help you arrange and must approve of your shadowing experience.
* Internships qualify and are superior experiences, but you still must have two **different** experiences to reach minimum requirements.
* Transportation is your responsibility.

**College Campus Tours**

* Include pictures and a reflection
* These campus visits may be through HHS trips or on your own.
* **If it is on your own**, include proof that your tour was organized by the college(ex:  email confirmation, signatures/stamps from college, follow-up letter, etc.)**.**
* An informal tour will **not** count.  Documentation must be provided to **prove** it was an **official tour**.
	+ It is not about stepping onto a campus, but it is about giving yourself every chance to learn everything that school has to offer.

**STEM Enrichment Trips**

* Trips that occur off-campus that allow students to experience STEM Topics in the real world. Have your trip approved by your STEM advisor before including it in your portfolio.
* Include pictures and a reflection for each trip.
* These can be trips through HHS STEM, through camps, or other experiences.
* Enrichment Trips should represent an ***enriching* experience** and should reflect a **variety** of Science, Technology, Engineering and/or Mathematic experiences.
	+ Mission trips, the Atlanta Science Festival, and certain tours are all good examples of the types of experiences we want you to have.
	+ Amusement parks, sporting events, family vacations, part-time jobs, most concerts and certain other types of activities will not count as enrichment trips. (For example, trips to Disney World or Six Flags do not qualify, but a trip to China probably will.)
	+ It *is possible* that you take a trip as part of a family vacation that is enrichment if approved by STEM advisor; be sure you document it with lots of pictures, possibly tickets or other artifacts, an excellent reflection, etc.
* A quick experience will **not** count.  It is not about stepping onto a location, but it is about giving yourself every **chance to learn**.

**Multicultural Events**

* Events such as attending professional theater, symphonies, symposiums, or festivals.
* Events which relate to or represent several cultural or ethnic groups.

**STEM Ambassadorship**

* As an upper classman we expect you to become a leader and representative of the Harrison STEM program.
* Includes helping run STEM Academy, talking at open house, guest speaking at feeder middle schools, speaking at STEM night, running STEM camp, helping with STEM applicant interviews, etc.
* All activities will require sign up & pre-approval.

**Volunteer Hours**

* Volunteer to **give back** to your community
* Include proper documentation, pictures, other artifacts, and a reflection about **each** volunteer experience.
* In your e-portfolio, make it very clear how many hours you served for **each** experience.
* Be sure that you understand what counts as volunteerism and what does not.
	+ For example, Big Brothers/Big Sisters, the Humane Society, Habitat for Humanity, local fire departments, Harrison Community Service Day, etc. would qualify.
	+ In almost all cases, it should be for a non-profit.  Volunteering through your church, your scouting group, or some other community organization is acceptable.
	+ What does **not** count:
		- Any activity for which you are paid
		- Any activity that takes place during the school day or as part of a class
		- Any activity that you perform for a family member (You’re supposed to rake your grandmother’s leaves.  She is your grandmother. You should do that anyway!)
* Volunteer hours for other HHS extracurricular groups (NHS, sports team, etc.) **can** count toward your hours.
* Volunteer hours are cumulative but do not “roll over” to a different event. (For example to earn two, 5-hour volunteer credits if you volunteer for 7 hours at one event, you can’t leave after 3 hours of a 5-hour commitment at another event when people are planning on you.)
* If any of your experiences with volunteerism includes some form of leadership, indicate that in your reflection.
* Check with your STEM advisor before adding to e-portfolio.

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| Reflections:* Advice--write it soon after your experience to capture a more thoughtful reflection.
* A reflection is NOT just a summary.  A summary is only PART of it.
* The reflection includes the course for which the file was created, the time it took to create the file, a brief description of why the file has been included in the e-portfolio, and an explanation as to why this file demonstrates achievement.
* A reflection includes also your feelings, opinions, personality, connections, revelations, goals, questions, etc.
* What did you learn? What were your surprises? What were your disappointments? How did this experience affect you? Include dates and places.  Don’t just tell what.  Tell why, how, wow!
* If you want someone to believe the experience was worthwhile enough for you to be a Distinguished Graduate based on what you got out of it, your reflection HAS TO BE meaningful!!
* See Rubric for scoring.

Pictures:* Ask permission before taking pictures with other people in them.
* **Work to appear in most of the pictures from each experience (selfies, group shots, you working on project, etc.)**
* While selfies are acceptable, in some situations you should avoid having all of your pics being selfies.
* Work to avoid taking pictures that look like Google images. Prove YOU experienced the moments.
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**Annual 6 Week Grading Period Rubric**

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| **Category** | **Exemplary (20)** | **Advanced (15)** | **Intermediate (10)** | **Incomplete (5)** |
| **Selection of Artifacts** | All artifacts and work samples are clearly and directly related to the purpose of the e-portfolio. | Most artifacts and work samples are related to the purpose of the e-portfolio. | Few artifacts and work samples are related to the purpose of the e-portfolio. | Most artifacts and work samples are unrelated to the purpose of the e-portfolio or not present. |
| **Use of Multimedia** | The use of audio/video/graphics/ photographs is integrated seamlessly into several different artifacts. | The use of audio/video/graphics/ photographs is included and appropriate. | The use of audio/video/graphics/ photographs is included but is used randomly and without purpose. | No use of audio/video, or graphics. The photos and audio or video are distracting from the content of the portfolio. |
| **Reflections** | All reflections clearly describe why artifacts in the e-portfolio demonstrate achievement. | Most of the reflections describe why artifacts in the e-portfolio demonstrate achievement. | A few reflections describe why artifacts in the e-portfolio demonstrate achievement. | Reflections are missing, and those that are there do not describe why artifacts in the e-portfolio demonstrate achievement. |
| **Creativity & Purpose of Index** | The index serves its purpose and shows creativity. The layout and design is attractive and well thought out. | The index serves its purpose and shows some creativity. | The index serves its purpose but lacks style. | The index does not serve its purpose and lacks style. |
| **Ease of Navigation** | The document is fully hyperlinked between the index (or Table of Contents), artifacts and reflections. The index is well organized and easy to navigate. Scribd is used for uploaded files as opposed to links. | Hyperlinks are organized into logical groups. Not all possible features have been employed. | Hyperlinks from the index (or Table of Contents) are linked to the artifacts but lack organization | The Index is plain with few if any links. Some links are “broken”. |

**STEM e-portfolio Checklist → Freshman Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ STEM Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* This process is mandatory in order to graduate with a STEM stole your senior year.
* You should have **ALL FRESHMAN REQUIREMENTS** checked off and submitted to your e-portfolio **before the** **end of your freshman year.**
* It is **your responsibility** to document and write reflections of your experiences (see rubrics).
* Your final e-portfolio should reflect experiences from **all four** years of high school.
* It is your responsibility to conference with your STEM teacher(s) about your annual e-portfolio requirements.
* You should keep up with and record all activities, honors, leadership, and other involvements that will contribute to your overall e-portfolio and your **SENIOR Resume**.

**\*These are the *MINIMUM* requirements!**

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| **FRESHMAN** **REQUIREMENTS****(Graded ITEMS)** | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| 2 Community Connections  |  |  |  |  |
| 1 Enrichment Trip |  |  |  |  |
| 2 Resume Boosters (Clubs, Competitions, Leaderships, etc.) |  |  |  |  |
| 2 STEMinars |  |  |  |  |
| 1 Science Fair Entry |  |  |  |  |
| 1 End of Year Oral Defense Presentation |  |  |  |  |
| 2 Outstanding ProjectsPer STEM class (Some course overlap may exist so this would count for each) |  |  |  |  |
| 9 Hours Summer Academy\* |  |  |  |  |
| 1 9th Grade STEM Skills Checklist with dates |  |  |  |  |
| 1 9th Grade Digital Microscopy image bank or slide show with labeled artifacts (magnification + identification) |  |  |  |  |

**STEM e-portfolio Checklist → Freshman Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ STEM Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **9th Grade** **Distinguished Options****2 DIFFERENT “Distinguished Options” – Your choice with STEM Advisor approval****(See 10-12 grade options for ideas)**(Any additional noteworthy & approved activities) | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| 1 Additional Community Connection |  |  |  |  |
| 1 STEM related competition other than Science fair |  |  |  |  |
| 1 Grant written & received |  |  |  |  |
| 1 Job Shadowing |  |  |  |  |
| 5 Volunteer Hours |  |  |  |  |

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| **9th Grade** **ABOVE & BEYOND**(Any additional noteworthy & approved activities) | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
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\*Rising freshman who miss the STEM Academy may make up missed time through additional pre-approved volunteer activities during their freshman year.

This completed form must be turned in to the STEM Coordinator (Ms. Allard) at the END of your freshman year.

**STEM e-portfolio Checklist → Sophomore Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ STEM Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* This process is mandatory in order to graduate with a STEM stole your senior year.
* You should have **ALL SOPHOMORE REQUIREMENTS** checked off **PLUS** at least **TWO** additional items from the **OPTIONS** checklist and submitted to your e-portfolio before the **end of your sophomore year.**
* It is **your responsibility** to document and write reflections of your experiences (see rubrics).
* Your final e-portfolio should reflect experiences from **all four** years of high school.
* It is your responsibility to conference with your STEM teacher(s) about your annual portfolio requirements.
* You should keep up with activities, honors, leadership, and other involvements that will contribute to your overall portfolio and your **SENIOR Resume**.

**\*These are the *MINIMUM* requirements!**

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| **SOPHOMORE** **REQUIREMENTS****(Graded Items)** | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| 2 Community Connections  |  |  |  |  |
| 1 Enrichment Trip |  |  |  |  |
| 2 Resume Boosters (Clubs, Competitions, Leaderships, etc.) |  |  |  |  |
| 2 STEMinars |  |  |  |  |
| 1 Science Fair Entry |  |  |  |  |
| 1 End of Year Oral Defense Presentation |  |  |  |  |
| 2 Outstanding ProjectsPer STEM class, per semester. (Some course overlap may exist so this would count for each) |  |  |  |  |
| 9 Hours Summer Academy or Pre-Approved Equivalent |  |  |  |  |
| 1 10th Grade STEM Skills Checklist with dates |  |  |  |  |
| 1 10th Grade Digital Microscopy image bank or slide show with labeled artifacts (magnification + identification) |  |  |  |  |

**STEM e-portfolio Checklist → Sophomore Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ STEM Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **SOPHOMORE DISTINGUISHED OPTIONS****CHECKLIST****(3 required)** | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio?? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| 2 Additional Community Connections  |  |  |  |  |
| 1 Additional Enrichment Trip |  |  |  |  |
| 1 STEM related competition other than Science fair |  |  |  |  |
| 1 Grant written & received |  |  |  |  |
| 1 Job Shadowing |  |  |  |  |
| 1 Job Shadowing |  |  |  |  |
| 5 Volunteer Hours |  |  |  |  |
| 5 Volunteer Hours |  |  |  |  |

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| **10th Grade** **ABOVE & BEYOND**(Any additional noteworthy & approved activities) | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
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͋ Rising sophomores obtaining pre-summer approval may participate in an alternative activity in lieu of the STEM Academy provided it requires a minimum 9 hour commitment.

This completed form must be turned in to the STEM Coordinator (Ms. Allard) at the END of your sophomore year.

**STEM e-portfolio Checklist → Junior Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* This process is mandatory in order to graduate with a STEM stole your senior year.
* You should have **ALL JUNIOR REQUIREMENTS** checked off plus at least TWO additional items from the optional checklist before the **end of your junior year.**
* It is **your responsibility** to document and write reflections of your experiences (see rubrics).
* Your final portfolio should reflect experiences from **all four** years of high school.
* It is your responsibility to conference with your STEM teacher(s) about your annual portfolio requirements.
* You should keep up with activities, honors, leadership, and other involvements that will contribute to your overall portfolio and your **SENIOR Resume**.

**\*These are the *MINIMUM* requirements!**

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| **JUNIOR** **REQUIREMENTS****(Graded Items)** | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| 2 Community Connections  |  |  |  |  |
| 1 Enrichment Trip |  |  |  |  |
| 2 Resume Boosters (Clubs, Competitions, Leaderships, etc.) |  |  |  |  |
| CV/Resume with cover letter |  |  |  |  |
| 1 Science Fair Entry |  |  |  |  |
| 1 End of Year Oral Defense Presentation |  |  |  |  |
| 2 Outstanding ProjectsPer STEM class, per semester. (Some course overlap may exist so this would count for each) |  |  |  |  |
| 2 STEM Ambassadorships (minimum 3 hours *each*)\* |  |  |  |  |
| 1 11th Grade STEM Skills Checklist with dates |  |  |  |  |
| 1 11th Grade Digital Microscopy image bank or slide show with labeled artifacts (magnification + identification) |  |  |  |  |

**STEM e-portfolio Checklist → Junior Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **JUNIOR****OPTIONS CHECKLIST****(4 Required)** | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| 2 Community Connections  |  |  |  |  |
| 1 College visit and reflection (with original pictures) |  |  |  |  |
| 1 Grant Written & Received |  |  |  |  |
| 1 Enrichment Trip |  |  |  |  |
| 1 STEM related competition other than Science fair |  |  |  |  |
| 2 Resume Boosters  |  |  |  |  |
| 1 Multicultural Event |  |  |  |  |
| 1 Job shadowing and reflection |  |  |  |  |
| 5 Community Service Hours |  |  |  |  |

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| **11th Grade** **ABOVE & BEYOND**(Any additional noteworthy & approved activities) | Completion Date | Documentation, photos, videos, etc. uploaded to e-portfolio? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
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This completed form must be turned in to the STEM Coordinator (Ms. Allard) at the END of your sophomore year.

NOTE: During the summer, as a rising senior you should be making community contacts to find an internship, or independent research sponsor, or have an independent research project plan. This will be discussed prior to summer dismissal at the end of your junior year.

**STEM e- Portfolio Checklist → Senior Year**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Advisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* This process is mandatory in order to graduate with a STEM stole your senior year.
* It is **your responsibility** to document and write reflections for your experiences (see rubrics).
* It is your responsibility to conference with your STEM teachers about your portfolio.
* You should keep up with activities, honors, leadership, and other involvements that will contribute to your overall portfolio and your **SENIOR Resume**.

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| **SENIOR****REQUIREMENTS****(Graded Items)** | Completion Date | Documentation and/or photos? | Reflection written? | STEM Advisor--sign off as student meets with you (w/ initials & date) |
| **The following three activities are REQUIRED** |
| Complete e-portfolio on Weebly |  |  |  |  |
| CV/Resume with cover letter |  |  |  |  |
| Community Service event/activity (1) with reflection; can be from any year in high school |  |  |  |  |
| Complete end of pathway culminating activity (internship/independent research/certification completion, etc.) |  |  |  |  |
| **Choose Resume Boosters or Projects (from any high school year)** |
| Resume Boosters (2) (club involvement, participation in sports, leadership roles, etc.) |  |  |  |  |
| Highlight (2) projects (with pictures and discuss the project breakdown, outcomes, and reflection |  |  |  |  |
| **Choose 2 of the 4 following activities (from any high school year)** |
| Multicultural Event (1) |  |  |  |  |
| Job shadowing and reflection (1)  |  |  |  |  |
| Personal Reflection (plans for post-graduation) (1) |  |  |  |  |
| Enrichment Trip (1)  |  |  |  |  |