Bergenfield School District

Science, Technology, Engineering and Mathematics (STEM) Program

Student/Advisor Manual

January 2012

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INDEX

Bergenfield School District
Science, Technology, Engineering and Mathematics (STEM) Program
Student/Advisor Manual

I. Purpose:

The Bergenfield School District's Science, Technology, Engineering, and Mathematics (STEM) Program Student/Faculty Manual has been designed as a reference guide for students, parents and faculty. This manual outlines and describes the basic guidelines, requirements, deadlines, etc. of the BHS STEM Program.

II. Introduction to STEM:

Today's job market is ever-changing due to our society's increasing dependence on, and expansion of new technology. Education itself is changing in order to keep pace and meet the future needs of our students. The parents of our gifted middle school students are well aware of their children's needs and research all the options available for their high school experience.

The Bergenfield STEM Program offers specially designed curriculum tracks for the most promising high school students in our District who are seriously considering a career in the STEM fields. If accepted into the STEM Program, students will be required to; maintain a "B" or better average in a set curricula of advanced coursework, work with an advisor over a 4-year period to design, conduct, and present the findings of a technical research project, and participate in at least one related state or national competition.

Students successfully completing this 4-year program will not only receive course credit for completing one of the most rigorous science and mathematics curricula available, they will experience "hands-on" primary research and graduate with "Elite" status.

III. Program Goal:

The primary goal of the STEM Program is to offer an accelerated curriculum track for our gifted students who are considering careers in the life science and engineering fields. The STEM program will prepare students for engineering-oriented colleges and eventually, successful integration into today's ever-changing technological job market.

IV. Program Specifics:

A. Student Selection (Refer to Appendix A):

1. Students must apply for acceptance into STEM.

2. Minimum qualifications for admission into the STEM Program:

a. Successful completion of Algebra 1 (B or better)
b. ASK 7 (or equivalent) scores of 230 and above
c. Successful completion of an entrance Exam
d. Successful panel interview.

3. Enrollment will be limited to 15 students per grade level.

B. Curriculum:

1. General:
It should be noted that all courses are made available to any BHS student and are not limited to STEM participants. However, STEM students will be given priority in ensuring that they are enrolled in required coursework each semester. STEM Students will be provided latitude in designing their complete curriculum around their required courses.

2. Required Coursework :
Students may design their particular course of study to suit their individual needs. The following are examples of possible Life Science and Engineering paths:

YEAR	**Life Science**	**Engineering**	**Medical**
1	Honors Chemistry Honors Geometry AP Physics	Honors Chemistry Honors Geometry AP Physics	Honors Chemistry Honors Geometry AP Physics
2	Honors Biology Honors Algebra II AP Chemistry	Honors Biology Honors Algebra II Robotics 1 AP Chemistry	Honors Biology Honors Algebra II AP Chemistry
3	PreCalculus (Honors) AP Biology	PreCalculus (Honors) Robotics 2	Precalculus (Honors) Medical Terminology AP Biology
4	Anatomy and Physiology Elective	AP Calculus Elective	AP Calculus Anatomy and Physiology AP Environmental

Electives: Marine Biology, Forensics, Medical Terminology, AP Environmental, robotics 3

C. Research Project:

1. General:

STEM students must work with an advisor over a 4-year period to design, conduct, and present the findings of a technical research project.

2. Portfolio, Journal, and Work Log (Refer to Appendix B):

a. Students must maintain an organized portfolio of all research-related work performed throughout his/her experience. This will include any notes, interviews, activities, research studies, etc. as they pertain to the project.

b. A running journal is also required and will serve to help organize the work.

c. It is the student's responsibility to document his/her hours of research-related study in a work log book.

d. Advisors will assist students in setting up their individual portfolios, journals, and work log books.

3. STEM Pass/Fail Marking Period Grade:

a. Students will receive a Pass/Fail grade each marking period based on, but not limited to their portfolio, journal and work log submissions. Bergenfield High School Science Department is honoring 1 credit per year.

b. Along with on-going formative assessment of student progress, advisors will provide their students with a summative assessment at the end of each marking period.

4. Deliverables and Deadlines (Refer to Appendix B):

a. Year 1 - Investigation and Selection of Research Topic:
Students will work with their advisor for a minimum of 1 hour per week to investigate and select a primary research question. A summary report (5-10 pages) must be submitted to the advisor by the last week of the 2nd marking period. Students will then conduct an extensive literature search of a topic of interest. Students must log all time spent conversing with their advisors whether it be in person, via e-mail, etc. in order to receive credit for this effort.

b. Years 2 & 3 - Essay Defense / Project Design & Research:
Students will prepare and defend a topic-related critical essay (25 – 40 pages) to a committee of STEM advisors during the first marking period of their second year. In

their second and third year, students will work with their advisor, and possibly, outside experts to design and conduct a technology-based research project. Students will be encouraged to work with affiliate colleges and/or universities. Students will continue to provide their advisors with on-going reports documenting work and research findings in order to receive credit.

c. Year 4 - Presentation of Research Findings:
In their final year, students will work with their advisor to compile their research findings (Thesis: 40 – 50 pages) and present them in a "defense-style" dissertation before a panel of STEM Advisors and outside experts.

D. Special Priority Requirements

1. Monthly Priority Day: On the first Monday of the month, ALL STEM students will be required to meet as a group (3:15pm – 4:15pm). The purpose of these sessions is to ensure that all participants are aware of and keeping pace with requirement deadlines.

2. Technology Seminars: All first year STEM Students must attend a minimum of five technology and engineering seminars to be held at FDU's Teaneck Metropolitan Campus. These sessions are run on Saturday mornings during the spring semester.

E. Competition Requirements:

1. General:

Students will be required to participate in at least one State or National Competition.

2. Options: Students may choose from the following:
   a. Student Paper Competition at a Professional Association's Technical Conference
   b. NJ State Envirothon Competition
   c. Chemistry Olympics
   d. State/National Science Fair Competition

V. Materials / Equipment Requirements:

Laptops for each student and advisor will be provided. Students seeking financial aid to support their work will be required to write grant proposals to the District Superintendent for monies to be applied to their specific research projects.

VI. Advisor Duties and Responsibilities:

1. General:
Each STEM student will be assigned an advisor whose background most closely reflects the student's field of interest. The advisor will provide guidance to his/her students over a 4-year period to ensure the quality of the technical research project. Depending on the stage of the project, advisors will typically meet at least weekly with their students, provide on-going guidance, and assess project progress each marking period.

2. Specific:

a. Investigation and Selection of Research Topic:
In their student's first year, advisors will guide them in selecting and researching a topic of interest. Advisors will keep a running log of all time spent working with each student.

b. Design and Conduct a Technology-Based Research Project:
In their student's second and third years, advisors will first assist them in completing and presenting the critical essay. Afterward, advisors will guide them in designing and conducting their technology-based research project. Advisors will encourage students to work with affiliate colleges and/or universities.

c. Presentation of Research Findings:
In their student's final year, advisors will assist them in compiling their research findings, writing their thesis, and presenting those results in a dissertation before a panel of STEM advisors.

d. Competition Requirements:
Advisors will assist students in preparing for and participating in a minimum of one state or national competition.

e. Research Project Assessment:
Depending on the stage of the project, advisors will typically meet at least weekly with their students, provide on-going guidance, and assess project progress in the form of an "Independent Study" course grade each marking period.

VII. STEM Coordinator Duties and Responsibilities:

1. General:

The primary duty of the STEM Coordinator (SC) is the implementation of the District's Program. He/she will ensure the proper infrastructure exists, coordinate and oversee the advisor/student activities, monitor the progress of the STEM students and ensure that all requirements of the program are met. The Coordinator will work with the Guidance Department to assist the students to succeed.

2. Specific:

a. Implementation of the STEM Program:
The SC will be responsible for continuing to develop and implement the Program. Implementation will include formulating and working within a program-specific budget and promoting the Program with outside colleges, universities and organizations.

b. Assure Proper Program Infrastructure:
The SC will ensure that all equipment, supplies, transportation, field trips, etc. are provided as part of the STEM experience.

c. Assistance in Literature Searches and Primary Research:
The SC will provide various avenues (mini-classes, guest lecturers, etc.) that will assist advisors in teaching proper literature search and primary research skills.

d. Oversee Advisor/Student Activities:
The SC will assist advisors and their students in meeting duties and responsibilities by holding monthly advisor meetings, individual student meetings as necessary, and provide any other assistance to enhance the STEM experience.

e. Assisting the Guidance Department:
STEM students will be expected to prioritize their obligations in order to meet all STEM requirements. The SC will work with the Guidance Department in assisting the STEM students to achieve their goals. The SC will also assist students in arranging for "independent research credit" for their primary research projects.

7. Outside Funding:

The SC will continue to explore the possibility of working in association with reputable engineering colleges and/or universities or corporate sponsors and seek out available grant monies to help offset the costs of the program.

IX. Summary:

The Program described herein, has been proposed to create advanced curriculum tracks for gifted Bergenfield students who are considering careers in the life science and engineering fields. The program outlined is geared to prepare

students for engineering-oriented colleges and eventually, successful integration into today's ever-changing technological job market. In offering this challenging curriculum, the Bergenfield School District strives to establish itself as a forerunner in the field of Science, Technology, Engineering, and Mathematics at the secondary level.

Appendix A
The Application Process

Please complete this application and return it to your guidance counselor or if you are currently attending a private school, please forward your application to Dr. Kahyaoglu, STEM Coordinator at Bergenfield High School, 80 S. Prospect Ave., Bergenfield, N.J. 07621 **no later than Friday, February 10th, 2012**!
No applications will be accepted after this deadline!

Should you have any questions, please do not hesitate to contact Dr. Kahyaoglu at akahyaoglu@bergenfield.org

Bergenfield Public Schools

SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS (STEM) Application

Return Due Date: February 10, 2012

We are very excited that you are interested in the Bergenfield High School STEM Program! Please complete this application and return it to your guidance counselor OR if you are currently attending a private school, please forward your application to Dr. Kahyaoglu, STEM Coordinator at Bergenfield High School, 80 S. Prospect Ave., Bergenfield, N.J. 07621.

Checklist of items to submit for the STEM application:

____ Submit completed application form
____ Personal Statement of future ambitions & why you would be a good candidate for the STEM program
____ Submit current schedule, marking period grades & ASK/COOP/Other test scores (if applicable)
____ Submit two letters of recommendation (Science & Math teachers ONLY)

Student Name: _____ Date of Birth: _____ Gender: M ___ F___
First Middle Last MM/DD/YYYY

Parent/Guardian: _____ Parent: _____ Guardian: _____
First Middle Last

Home Phone: _____ Cell Phone: _____ Business Phone: _____

Address: _____
Number & Street

If you are not currently attending Roy W. Brown Middle School, please complete the following:

	Current Schedule:	Most Recent Marking Period Grades:
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____

Number of days absent this year: _____ Number of days absent last year: _____
Have you ever been suspended from school? If so, provide details below:

My signature indicates the information above is accurate.

_____ _____
Student signature Parent/Guardian signature and date

Appendix B
Deliverable Requirements and Deadlines

I. Journal:
- A. The journal may be kept electronically or in script. The journal should be chronological and, at a minimum, include:
  1. Dates of entries
  2. Thoughts, ideas and opinions
  3. Objective and subjective observations
- B. The journal will serve as qualitative documentation of progress and will be assessed each marking period.

II. Portfolio:
- A. The portfolio requirement will vary depending on the type and scope of the project that the student pursues. Typically, the portfolio should, at a minimum, include:
  1. Table of contents
  2. Organized collection of project-related documents
- B. The Portfolio will serve as quantitative documentation of progress and will be assessed each marking period.

III. Work Log:
- A. The work log requirement should document all hours dedicated to project-related work and should include:
  1. Date
  2. Activity
  3. Number of hours logged
- B. The work log will serve as quantitative documentation of progress and will be assessed each marking period.

IV. Summary Report (first year students only)
- A. A summary report (5-10 pages) must be submitted to the advisor by the last week of the 2nd marking period.
- B. The purpose of this report is to make sure that students fully understand the concept of the critical essay. Advisor requirements will vary based on the situation.

V. Essay / Defense Guidelines (2nd Year Critical Essay and 4th Yr. Thesis)
- A. **Writing Guidelines**:
  1. Work with your English teacher. Your teacher will be happy to assist you as far as proper "writing guidelines".
  2. Follow all BHS English Department guidelines for grammar, punctuation, reference formats, etc.
  3. Double space.

B. **Title Page**

Your Title Page should include:

1. Full title of your essay/thesis. The title should be concise but detailed enough to reflect the unique nature of your specific area of interest.
2. Your Name (Do not write "by")
3. Your Advisor's Name (Indicate "Advisor")
4. A statement that this document is "in partial fulfillment of the requirements for the Bergenfield High School Science Technology, Engineering, and Mathematics Program".
5. Date: Month, Year

C. **Abstract**

1. An abstract is usually a one or two paragraph synopsis of your scientific question (essay) or hypothesis (thesis) your findings, and conclusion.
2. The abstract comes after the title page but is NOT page 1 of your essay/thesis.

D. **Essay / Thesis Structure**

1. **Introduction**:
   a. Scientific critical essays and theses always begin with a detailed description of the question being posed, the validity for seeking answers to that question, and the thought process that led to your inquiry.
   b. You are summarizing the weeks and/or months of thought and initial research that you put into the "starting point" for your literature search or primary research. To adequately address this, your introduction will most likely be between 4 to 6 pages (essay) 6-10 pages (thesis). For your thesis, state your hypothesis in the introduction.

2. **Body**
   a. The body of your essay will introduce, explain, and relate all literature pertaining to your question. For the thesis you will support your conclusion.
   b. Findings should be organized so that all related information can be discussed in a smooth, flowing manner, that is easy to follow and supportive of your goal.
   c. All sources of information must annotated as per the guidelines of the BHS English Department.
   d. Obviously, the length of the body of a critical essay and thesis will vary based on the specificity of the topic. However, most of the topics being investigated should

require between 25 to 40 pages (essay), 40 to 50 pages (thesis).

3. **Conclusion**

   a. Restate your original question. If the original question has been altered based on your findings, state its new form. (For the thesis – restate your hypothesis).
   b. Unlike the introduction, objectively identify the need to answer your question in the scientific community.
   c. For the thesis, state your conclusions.

4. Summarize your findings and explain the reasoning behind pursuing your future research.

E. **Submission Deadlines**

1. The final draft of your Critical Essay is due by the last week of the 1st marking period in your 2nd year. The final draft of your thesis is due by the end of the 3rd marking period in your 4th year.
2. Arrange with your advisor to submit rough drafts as needed prior to that date to avoid problems.

F. **Defense**

1. You are required to defend your critical essay in your second year and research project in your senior year of the STEM Program.
2. Your advisor will assist you in preparing for your defense. Consider the critical essay defense as a good preparation for your thesis defense as a senior.
3. Basically, on or about the first week in June you will be required to discuss your findings with a panel of no less than 3 BHS faculty members. You are expected to be the “expert” on your topic.

Appendix C

Frequently Asked Questions

What is STEM Education?

Science, technology, engineering and mathematics (STEM) education is a relatively new mode of thinking about how best to educate high school students for the workforce and for post-secondary education.

STEM education is not simply a new name for the traditional approach to teaching science and mathematics nor is it just the grafting of “technology” and “engineering” layers onto standard science and math curricula. STEM education removes the traditional barriers erected between the four disciplines, by integrating the four subjects into one cohesive means of teaching and learning. The engineering component puts emphasis on the process and design of solutions instead of the solutions themselves. This approach allows students to explore math and science in a more personalized context, while helping them to develop the critical thinking skills that can be applied to all facets of their work and academic lives. Engineering is the method that students utilize for discovery, exploration, and problem-solving.

The technology component allows for a deeper understanding of the three other parts of STEM education. It allows students to apply what they have learned, utilizing computers with specialized and professional applications like Autodesk Design Academy and computer animation. These and other applications of technology allow students to explore STEM subjects in greater detail and in a practical manner.

Why is STEM Education Important?

High school education must adapt to the changing needs of America’s economy. All sectors of the workforce – from entry-level jobs to more advanced positions – are requiring workers to have a greater capacity to think critically, work independently, and apply an ever widening set of sophisticated skills. Even entry-level jobs require these sophisticated skills from their “unskilled” workers.

Increasingly more college graduates are opting out of technical fields like engineering and the hard sciences, reducing the supply of potential workers for America’s emerging needs within these fields. As current workers in the engineering and hard science fields reach retirement age, the United States will not be able to fill these positions to keep itself competitive in the international labor market.

STEM education provides an early groundwork for fostering students' interest in these kinds of careers and provides the entry-level skills for the workforce and for post-secondary education.

How Does STEM Education Affect My Organization?

As STEM education gains footing with our nation's high schools, many facets of teaching and learning will adapt from teacher education and in-service development to upgraded course materials and funding, STEM education affects a wide-range of high school policy and practice.

How much does it cost to take part in the STEM Program?

The STEM Program is offered free of charge to all participants through the generosity of Bergenfield Board of Education and partnering universities. In addition, STEM students will have laptops to conduct their research.

How do we recruit students?

We are looking for bright, motivated young people who are interested in math and science and want to excel in school. In the late fall and early winter, we contact RW Brown middle school for teacher recommendations for students they think would benefit from our programming. We post our application online, so everyone can access our information in time for our deadline.

The STEM Program recruits students, residing in Bergenfield, who are **enrolled** in public or private schools.

The selection committee will review the application by March and notify the students by March 15th.

The application package must include:

- Two letters of recommendation from Math and Science teachers.

- Middle School Official Transcript.

In addition, students are required to take a 25 multiple choice questions test based on prior knowledge of Science and Mathematics and write an essay during the test.

STEM Program is limited to 15 students.

Why is homework assigned during the summer?

Homework is a requirement for the STEM Program. Part of our goal is to prepare students for academic success in middle school, high school, college and beyond. The point of homework is to review concepts introduced in class, identify and address areas that may be unclear or confusing and develop mastery of the content. We believe that developing a habit of producing high quality homework is critical to their long-term success.

If I get into the STEM Program, do I have a better chance of getting into competitive schools?

Really, that is up to you. The STEM Program is an excellent place to start, but that's just the beginning. You will have to work hard and make a serious commitment to your learning throughout middle and high school.

My child will be in the 9th grade in September. Can she apply to the STEM Program?

Yes. The STEM program accepts Bergenfield resident students who will be a 9th grader in September 2011.

Who will teach my child?

The STEM Program is staffed by six mentors who possess a mastery of the technical disciplines, knowledge of cutting edge developments in science and technology and a love of teaching.

What if my child doesn't want to participate in some of the activities?

The STEM Program is a competitive program and selected participants are expected to take part in the **full** complement of programming.

What resources are available for parents?

We believe that parents are children's first teachers. The STEM Program works closely with parents throughout the year to ensure that participants are receiving the academic enrichment they need.

To cultivate those relationships, we host Parents Seminars in collaboration with families in during the Bergenfield High School Open House and Parent-Teacher Conferences.

Can my child opt out of the STEM Program?

Yes. STEM is a voluntary program. Students must fulfill the STEM requirements in order to stay in the program. A student wishing to opt out of the Program is asked to submit a letter, signed by a parent or guardian stating his/her intentions.

BHS STEM PROGRAM
80 South Prospect Avenue
Bergenfield, New Jersey 07621

Teacher Recommendation Form (Confidential)

Student Biographical Information
To be completed by applicant

Applicant 's first name_____ Middle name_____ Last name_____
Year of graduation_____ Home e-mail address_____

In addition to the application, and academic transcript, the applicant must submit this recommendation in order to be considered for admission to the STEM Program. Please complete this form and return it directly to the Roy W. Brown Middle School or Dr. Kahyaoglu at BHS.

To be completed by current teacher

Your name(s)_____ School_____

Academic Subject taught_____ How long have you known the applicant? _____

May we call you?_____ Phone _____ Best Time_____

Please check if you would like to talk about this applicant _____

Teachers – Please rank student according to his/her merit in each of the following categories. Please circle the number that reflects his/her performance. **Comments are welcome, but not required.**

1. **Current academic performance**
   10 9 8 7 6 5 4 3 2 1
   (excellent) (limited)

2. **Level of motivation, effort and perseverance**
   10 9 8 7 6 5 4 3 2 1
   (excellent) (limited)

3. **Study habits**
   10 9 8 7 6 5 4 3 2 1
   (excellent) (limited)

4. Use of class time

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

5. Classroom conduct

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

6. Use of academic potential

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

7. Leadership

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

8. Honesty and Integrity

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

9. Consideration for others

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

10. Service (if applicable) (Circle one)

Has a history of helping others through service
Has shown willingness to help others through service
Not willing to help others through service

Behavior

Has this applicant ever
_____been suspended?
_____been on behavioral contract?
_____received frequent detentions?
_____other disciplinary actions?

Is there anything else BHS should know regarding this applicant to help evaluate his/her application?

_____
_____
_____

Signature _____ Date_____
Title_____

Appendix D
STEM FACULTY (Advisors)

Dr. Ara Kahyaoglu STEM Coordinator	(Chemistry/Environmental Science)
Ara Kahyaoglu	(Chemistry)
Allen Bongo	(Mathematics)
Steve Neff	(Physics/Environmental Science)
Anthony Senzamici	(Biology/Medical)
Anu Thadani	(Biology/Forensics)

TEAMING COLLEGES

Fairleigh Dickinson	(Metropolitan Campus)
Ramapo College	(Mahwah)
Bergen Community College	(Paramus)

Appendix E

BERGENFIELD HIGH SCHOOL
Sample STEM PROGRAM ENTRANCE TEST- 2010
80 South Prospect Avenue
Bergenfield, New Jersey 07621

Duration of the test is 35 min. Write your name on the scan-tron.

1. Which of the following is closest to 0.25?

   A. 9/40 B. 5/16 C. 9/32 D. 0.28 E. 15/64

2. The average of six numbers is 4. A seventh number is added and the new average is 5. What is the seventh number?

   A. 1 B. 5 C. 6 D. 11 E. 12

3. A test has 50 questions. Each right answer is worth 2 points; each wrong answer deducts 0.5 point; blank answers are not counted. A student got a score 88.5. How many answers did he leave blank?

   A. 4 B. 5 C. 6 D. 7 E. 8

4. Two numbers have a sum of 30 and a product of 209. What is the positive difference between them?

   A. 2 B. 4 C. 8 D. 12 E. 16

5. How many days are there from March 15 to September 15?

   A. 182 B. 183 C. 184 D. 185 E. 186

6. Using pennies, nickels and dimes, how many ways can you make 16 cents?

   A. 4 B. 5 C. 6 D. 7 E. 8

7. If $\boldsymbol{n}$ # $\boldsymbol{d}$ is defined as $d[d+3n]$, evaluate 2 # 1.

   A. 5 B. 6 C. 7 D. 4 E. 8

8. Predict the value of ***n*** in the following arrangement of numbers.

   1, 2, 3, 5, 8, 13, ***n***

   A. 14 B. 18 C. 21 D. 22 E. 23

9. Multiply 1.16 by 0.0204

A. 0.02 B. 0.23664 C. 0.0023664 D. 0.023664 E. none of these

10. 80 is 5 percent of what number?

A. 450 B. 1600 C. 40 D. 800 E. 400

11. What is the square root of ¼?

A. ½ B. -½ C. ¾ D. ¼ E. -¼

12. What digit does Q represents in the following subtraction?

$$\begin{array}{r} 131Q \\ -QQ2 \\ \hline T4T \end{array}$$

A. 0 and 1 B. 2 or 3 C. 4 or 5 D. 6 or 7 E. 8 or 9

13. A train travels 24 miles in 36 minutes. What is the speed of the train in mph?

A. 36 B. 40 C. 45 D. 48 E. 60

14. What is the area of a square field that has a side of 3 m?

A. 3 B. 6 C. 9 D. 0.33 E. 27

15. You are given nine pennies and a platform balance.

One penny is lighter than the other eight of equal mass. The minimum number of trials needed in order to find the light penny is (*Hint: the answer is not 1*)

A. 9 B. 2 C. 3 D. 4 E. 5

BHS STEM PROGRAM
80 South Prospect Avenue
Bergenfield, New Jersey 07621

Teacher Recommendation Form (Confidential)

Student Biographical Information
To be completed by applicant

Applicant 's first name_____ Middle name_____Last name_____

Year of graduation_____ Home e-mail address_____

In addition to the application, and academic transcript, the applicant must submit this recommendation in order to be considered for admission to the STEM Program. Please complete this form and return it directly to the Roy W. Brown Middle School or Dr. Kahyaoglu at BHS.

To be completed by current teacher

Your name(s)_____ School_____

Academic Subject taught_____ How long have you known the applicant? _____

May we call you?_____ Phone _____ Best Time_____

Please check if you would like to talk about this applicant _____

Teachers – Please rank student according to his/her merit in each of the following categories. Please circle the number that reflects his/her performance. **Comments are welcome, but not required.**

1. **Current academic performance**
   10 9 8 7 6 5 4 3 2 1
   (excellent) (limited)

2. **Level of motivation, effort and perseverance**
   10 9 8 7 6 5 4 3 2 1
   (excellent) (limited)

3. **Study habits**
   10 9 8 7 6 5 4 3 2 1
   (excellent) (limited)

4. **Use of class time**

10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

5. **Classroom conduct**
10 9 8 7 6 5 4 3 2 1
(excellent) (limited)

6. **Use of academic potential**
10 9 8 7 6 5 4 3 2 1
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7. **Leadership**
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8. **Honesty and Integrity**
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Not willing to help others through service

Behavior

Has this applicant ever
_____been suspended?
_____been on behavioral contract?
_____received frequent detentions?
_____other disciplinary actions?

Is there anything else BHS should know regarding this applicant to help evaluate his/her application?

_____
_____
_____

Signature _____ Date_____
Title_____

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4. Use of class time

10 9 8 7 6 5 4 3 2 1

(excellent) (limited)

5. Classroom conduct

10 9 8 7 6 5 4 3 2 1

(excellent) (limited)

6. Use of academic potential

10 9 8 7 6 5 4 3 2 1

(excellent) (limited)

7. Leadership

10 9 8 7 6 5 4 3 2 1

(excellent) (limited)

8. Honesty and Integrity

10 9 8 7 6 5 4 3 2 1

(excellent) (limited)

9. Consideration for others

10 9 8 7 6 5 4 3 2 1

(excellent) (limited)

10. Service (if applicable) (Circle one)

Has a history of helping others through service
Has shown willingness to help others through service
Not willing to help others through service

Behavior

Has this applicant ever
_____been suspended?
_____been on behavioral contract?
_____received frequent detentions?
_____other disciplinary actions?

Is there anything else BHS should know regarding this applicant to help evaluate his/her application?

_____
_____
_____

Signature _____ Date_____
Title_____