

FIRST New Hampshire Robotics

Learn Everywhere Application

I. Organizational Details

A. Our Organization:

FIRST New Hampshire Robotics is responsible for overseeing and supporting all of the New Hampshire *FIRST* teams and events. It is the on-the-ground program working with schools, school districts, businesses, and communities to ensure that as many NH students as possible benefit from the *FIRST* experience.

B. Contact Details:

FIRST New Hampshire Robotics
20A Northwest Blvd #445
Nashua, NH 03063
601-759-1509
Frank Grossman - Director
fgrossman@firstnh.org

II. Program Description

FIRST, which stands for For the Inspiration and Recognition of Science and Technology, is the leading global youth-serving STEM organization. It serves over 679,000 students globally, activates 320,000 mentors, coaches, and judges serving in volunteer roles, and its program delivery partners hold over 3,700 events annually. The *FIRST* programs are designed for various age bands of school aged students to provide appropriate amounts of rigor. *FIRST* defines success by measurable goals such as the number of students participating in the four programs annually, the number of schools that have *FIRST* teams, the number of volunteers annually, and the programs' impact. In the most recent evaluation cycle, we currently see 18% year-over-year growth in students reached globally. *FIRST* is more than robots and our vision is to develop the next generation of innovators and leaders.

The *FIRST* NH Learn Everywhere program will provide students with the opportunity to demonstrate skills in related STEM areas that relate to activities performed as part of the team experience in the two *FIRST* high school divisions, *FIRST* Tech Challenge and *FIRST* Robotics Challenge. These competitions involve students not only building robots but building their team, community and self. Activities in our programs from the robot competition and other judged awards that look at student leadership, community building, team safety and team technical abilities are all reflected in the learning opportunities for students. Actions related to each of these areas cross the

subjects of computer science, business education and STEM. The associated competencies to these various team activities are reflected in our educational program description as opportunities for students to demonstrate mastery of each skill.

III. Policies

A. Instructor Qualifications

Our instructors are *FIRST* team mentors who provide educational opportunities for students to engage in robot design and building as well as programming.

The *FIRST* NH policy is that the mentor or coach that is filling out the program competency form for a student must meet one of the following qualifications:

- Been in a job for at least 2 years using all of the competencies listed on the program competency form for the specific certificate.
- Received a post secondary education certificate or degree that covered all of the competencies listed on the program competency form for the specific certificate.
- Be an educator trained in teaching all of the competencies listed on the program competency form for the specific certificate.

When a mentor requests the competency application for a student, the mentor will need to submit which of the qualifications above they meet and send proof of that qualification before we will send the application.

B. Criminal History Records Check

Mentors for *FIRST* programs are checked using the *FIRST* Youth Protection Plan (YPP).

The *FIRST* YPP uses the following methods: Our contracted Level 2 Background Check package with Sterling Volunteers includes the following database searches:

- National Criminal Database
- DOJ Sex Offender Registry
- County Court of Residence Search
- Government Watch List Search (OFAC)
- State Public Safety & Trial Courts
- State Criminal Search

After the initial background check the National databases are rechecked once a month for the next 11 months as allowed under FCRA guidelines.

http://www.gencourt.state.nh.us/rules/state_agencies/ed300.html

FIRST makes it clear on their website that the main coach and mentors have to go through the screening in order to have a team.

<https://www.firstinspires.org/robotics/terms-and-conditions>

Do you affirm that you will not allow instruction or student contact by a person who has been changed pending disposition for, or convicted of any violation or attempted violation of any of the offenses as outlined in RSA 189:13-a, V pursuant to a criminal history records check conducted by the department of safety as outlined in Saf-C 5703.06 through Saf-C 5703.11?

Yes No

C. Admissions

Student admission into the *FIRST* NH Learn Everywhere program will be through student self-selection to participate. Any student on a *FIRST* team will be eligible. Program applications will be made available to all local education agencies (LEA). Students with IEP's will be allowed accommodations for demonstration of performance tasks and assessments in accordance with their learning plans.

We understand that to participate in the program we have certain responsibilities, pursuant to Section 504 of the Rehabilitation Act, to provide students with disabilities equal access and opportunities to participate in the *FIRST* NH learn everywhere program, including by providing the student with reasonable accommodations.

Every student in New Hampshire is eligible to participate in the age appropriate *FIRST* program.

Do you affirm that your admissions process are not designed, intended, or used to discriminate or violate individual civil rights in any manner prohibited by law?

Yes No

D. Liaison with the Local Educational Agency

A *FIRST* NH team that is participating in the Learn Everywhere program offers parents/guardians the opportunity to disclose any information regarding ongoing 504 education plan related accommodations and modifications required for their child. With the parent's / guardian's permission, the *FIRST* team coach will contact the student's Local Education Agency (LEA) to coordinate recommended 504 accommodations and/or modifications in the *FIRST* programs. If *FIRST* determines it is unable to provide the required accommodations and/or modifications for a student, the parents / guardians will be informed.

A *FIRST* NH team that is participating in the Learn Everywhere program gives parents / guardians the opportunity to disclose any sorts of disabilities, including any related Individualized Education Program (IEPs). If requested, the *FIRST* team will work with the parent/guardian to contact the student's Local Education Agency (LEA) to assist in the coordination of the student's IEP to include, but not be limited to, the required special education programs, support services, and least restrictive environment. At the parent's/guardian's request, a *FIRST* team's representative will participate in IEP team meetings that discuss revisions to the student's IEP needed to participate in a *FIRST* program. *FIRST* will also coordinate with the LEA in fulfilling the LEA's responsibility to provide any special education, related services, supplementary aids and services, accommodations, and modifications the IEP team has determined the student needs. The provision of these services is not the direct responsibility of *FIRST* NH.

Facilities and Insurance

E. Educational Facilities

FIRST New Hampshire Robotics relies on the facilities that our teams choose to use as their meeting places for the majority of our program learning. This could be school classrooms and workshops, family homes, 4-H buildings, or other spaces that choose to host *FIRST* teams.

Similar to III A. above, when the mentor indicates interest in participating in the Learn Everywhere program, they will have to check a box on a form to certify that their facility meets these requirements.

F. Affirmation of Compliance

Do you affirm that your facilities shall comply with all applicable federal and state health and safety laws, rules, and regulations? These include but are not limited to fire safety codes and barrier-free access under Abfd 300, code for barrier-free design, and the Americans with Disabilities Act of 1990(ADA), as amended by the ADA Amendments Act of 2008.

Yes No

Please note that participation in the Learn Everywhere Program shall not make facility requirements not otherwise required by state or federal law.

G. Proof of Insurance

FIRST New Hampshire Robotics carries a Commercial General Liability Policy with Eaton & Berube of Nashua, NH issued by Philadelphia Insurance Company. A copy of the Certificate of Insurance is attached.

IV. Educational Program

A. Proposed Certificates for Learn Everywhere

If approved, you will be empowered to grant certificates to students who can then turn those certificates in at their schools and redeem them for credit. Each certificate you issue will be accepted by schools as the equivalent of a high-school course.

Please list the certificates that you propose to issue to students, and for each, list the relevant graduation subject for which it will serve as an equivalent. (These can be found in NH Ed NH Ed 306.27(v) .)

Certificate	Credit Total	Graduation Subject (Electives)
<i>Business Essentials</i>	1 Credit	Business Education Elective
<i>Business Technology</i>	1 Credit	Business Education Elective
<i>Computer Science</i>	1 Credit	Computer Science Elective
<i>Intro to Engineering and Robotics</i>	1 Credit	Technology Education Elective
<i>Advanced Engineering and Robotics</i>	1 Credit	Technology Education Elective

<i>Manufacturing</i>	1 Credit	Technology Education Elective
<i>Marketing, Sales, Services</i>	1/2 Credit	Technology Education Elective
<i>Arts, Audiovisual technology, and communications</i>	1/2 Credit	Technology Education Elective

B. Competencies and Student Outcomes

All Learn Everywhere certificates must be competency-based. This means that you shall award certificates not based on time or participation but on student mastery of a certain set of skills or competencies that you define. For each certificate which you propose to offer, please provide here a list of the competencies that students must master in order to achieve that certificate.

[Examples to be provided to applicants from state standards and, where possible, from accepted applications.]

Utilizing the New Hampshire N.H. Code Admin. R. Ed 306.xx guidelines, existing standards, competencies and student outcomes from State frameworks in Florida and California and the International Society for Technology in Education standards for the corresponding subject areas, the competencies below reflect the skill and competencies students must master to achieve each *FIRST* certificate.

Students develop the competencies over the course of their high school career and through participation with their *FIRST* team. Some competencies may be mastered during a single *FIRST* season, but more often these competencies are developed through multiple seasons with their team. Students generally work as part of small groups within the team, but they may work independently as well. And, while *FIRST* is primarily a robotics program, most *FIRST* teams are structured like a small business, with multiple groups and/or functional areas such as mechanical design, software development, manufacturing, finance, information technology, and marketing. Students may specialize in one or a small number of functional areas within the team, or they may gain broad experience in many areas. In order to provide learning opportunities for all students who participate in *FIRST*, seven potential course credits are available through eight course areas, covering all aspects of the *FIRST* experience.

Competencies for Business Education Elective – Business Essentials Certificate (1 Credit)

1. **Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

2. **Business Communication:** Demonstrate an understanding of business communication by analyzing types of communication and the role communication plays for their Team to facilitate teamwork, task management, and resolve conflicts.
3. **Management of Resources:** Demonstrate an understanding of the purpose and use of the Team Plan to include the Business Plan to address the needs of the Team and explore solutions.
4. **Business Safety** - Evaluate how to provide a safe, secure work environment that protects the organization from liability.
5. **Employability Skills** - Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship.
6. **Business Practices** - Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
7. **Business Leadership** - Demonstrate an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles.

Competencies for Business Education Elective – Business Technology Certificate (1 Credit)

1. **Written Communication:** Demonstrate an understanding of written communication by examining email and word processing software applications and using formatting to convey a message or information effectively.
2. **Data Analysis:** Demonstrate an understanding of the purpose of spreadsheets to inform decision-making by examining the formatting of spreadsheets, creating spreadsheets, and explaining the use of spreadsheets.
3. **Marketing and Outreach:** Demonstrate an understanding of how marketing fits into the Team Plan.
4. **Interactive Media:** Demonstrate an understanding of creating, editing, and distributing digital images, explaining editing options, designing and enhancing images, and evaluating distribution options and considerations.
5. **Electronic Communications and Internet Services:** Demonstrate an understanding of the Internet for business by investigating Internet functions, effective Internet use, website development, and content creation.
6. **Presentations and Public Speaking:** Demonstrate an understanding of presentations by creating and giving a slide presentation.
7. **Business Plan and Finance:** Demonstrate an understanding of the purpose and use of the Team Plan (to include the Business Plan) to address the needs of the Team and explore solutions.

Competencies for Computer Science Education Elective – Computer Science Certificate (1 Credit)

1. **Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
2. **Defining an Engineering Problem and Exploring Solutions:** Students demonstrate an understanding of how to define an engineering problem and explore solutions by researching and asking questions about the problem and utilizing a systematic approach to explore possible solutions to a task.
3. **Design a Solution:** Demonstrate an understanding of programming solution design by creating an outline of a solution to a complex problem.
4. **Pseudocode:** Demonstrate an understanding of the process for writing code by writing pseudo code, writing the actual code, and identifying the strengths and weaknesses of the coding solution.
5. **Innovative Designer:** Demonstrate an understanding of solving problems using a design process by creating new, useful, and imaginative solutions.
6. **Programming/ Fundamental Data Structures & Algorithms:** Understand the basic principles of computer program development to create a foundation for building more complex software design.
7. **Testing and Iteration:** Demonstrate an understanding of the process used to improve robot performance through testing, debugging, reflecting, and revising the code.

Competencies for Technology Education Elective – Intro to Engineering and Robotics Certificate (1 Credit)

1. **Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
2. **Defining an Engineering Problem and Exploring Solutions:** Demonstrate an understanding of how to define an engineering problem and explore solutions by researching and asking questions about the problem and utilizing a systematic approach to explore possible solutions to a task.
3. **Design and Engineering Solution:** Demonstrate an understanding of solution design by creating an outline of a solution to a complex engineering problem.
4. **Technical Drawing:** Demonstrate skill in technical sketching and drawing as it relates to engineering design.
5. **CAD Modeling Basics and Applications:** Demonstrate basic computer-aided design (CAD) knowledge and skills.
6. **3D Printing:** Students demonstrate an understanding of 3D printing as a method for problem-solving.
7. **Control Systems:** Demonstrate foundational knowledge and skills associated with the design of engineering systems (mechanical, electrical, and electronic systems).
8. **Machining Parts:** Demonstrate technical knowledge and skills for machining.
9. **Automation:** Demonstrate content and skills associated with robotics and automation.
10. **Safety:** Work safely within your team practice, building and competition space.

Competencies for Technology Education Elective – Advanced Engineering and Robotics Certificate (1 Credit)

1. **Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
2. **Defining an Engineering Problem and Exploring Solutions:** Demonstrate an understanding of how to define an engineering problem and explore solutions by researching and asking questions about the problem and utilizing a systematic approach to explore possible solutions to a task.
3. **Iterating an Engineering Solution:** Demonstrate an understanding of the process used to test and improve a product by completing the test process, reflecting on, and revising a product to better perform desired tasks.
4. **Build a Prototype:** Students demonstrate an understanding of the process of and purpose of building a prototype by producing a preliminary robot to explore the strengths and weaknesses of a proposed solution.
5. **CAD Modeling Applications:** Demonstrate basic computer-aided design (CAD) knowledge and skills.
6. **3D Printing:** Students demonstrate an understanding of 3D printing as a method for problem-solving.
7. **Control Systems:** Demonstrate theoretical and practical skills associated with the design of engineering systems (mechanical, electrical, and electronic systems).
8. **Advanced Machines:** Demonstrate technical knowledge and skills in the design and building of advanced machines as part of your robot system.
9. **Automation:** Demonstrate content and skills associated with robotics and automation.
10. **Safety:** Work safely within your team practice, building and competition space.

Competencies for Technology Education Elective – Manufacturing Certificate (1 Credit)

1. **Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
2. **Manufacturing Design:** Demonstrate the application of the engineering and design process to solve a multidisciplinary problem.
3. **Workplace Safety:** Perform safe actions that follow industry standard safety guidelines.
4. **Measurement and Technical Instruction:** Perform measurement tasks and interpret information from schematics or technical drawings.
5. **Machine Tools:** Demonstrate use of appropriate machine tools to perform a job.
6. **Manufacturing Planning Tools:** Demonstrate an understanding and perform tasks related to planning and control processes in manufacturing.
7. **Machines and Mechanisms:** Demonstrate an understanding of machines and mechanisms.
8. **Quality Assurance and Control:** Demonstrate and use quality assurance and control methods during manufacturing processes.

Competencies for Technology Education Elective – Arts, audiovisual technology, and communications Certificate (1/2 Credit)

- 1. Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
- 2. Internet security, digital ethics, and Web Design:** Students demonstrate an understanding of digital rights, ethics, and security by explaining the purpose of digital rights, ethical and unethical practices, and the best practices for internet security.
- 3. Connecting with your Web Audience:** Demonstrate an understanding of connecting with a web audience by describing the types of web audiences that might access the Team’s website, strategies to reach them, and the strategies for the use of multimedia, writing, and marketing of the website.
- 4. Website Planning, Design, and Creation:** Demonstrate an understanding of website planning, design, and creation by explaining website design phases and evaluation, best practices, and development plans.
- 5. Video Production:** Demonstrate an understanding of the phases of planning, creating, and distributing digital images and video.

Competencies for Technology Education Elective – Marketing, Sales, Services Certificate (1/2 Credit)

- 1. Empowered Learner:** Understand how to leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
- 2. Relationships:** Demonstrate human relations skills necessary for success in marketing occupations.
- 3. Communications:** Demonstrate proficiency in applying communication and technology skills.
- 4. Entrepreneurship:** Demonstrate an understanding of entrepreneurship.
- 5. Marketing Mathematics:** Demonstrate the use of math skills unique to marketing.

In addition, for each of your competencies, describe your desired student outcomes - what student mastery of that competency looks like.

For each competency outlined in the section above there are corresponding student outcomes and specific examples for what student mastery for the competency looks like. For example, to fully master the competency of Programming/Fundamental Data Structures & Algorithms on the Computer Science Education Elective – Computer Science Certificate, there are three related student outcomes and each outcome has one to two examples of what student mastery looks like.

See the example below from the Program Competency Student Profile Document.

Programming/ Fundamental Data Structures & Algorithms: Understand the basic principles of computer program development to create a foundation for building more complex software design.	Demonstrate the use of primitive data types by writing statements to perform arithmetic operations and using programming concepts such as primitive data types and variables.	Create a presentation, blog entry, or technical document explaining how primitive data types in programming statements use variables and expressions, user input, conditional statements, and loops to perform arithmetic operations.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	1	2	3	4
	1	2	3	4			
Demonstrate the use of primitive data types by writing statements to perform arithmetic operations using programming concepts such as Boolean expressions and If Statements.	a. Create a presentation, blog entry, or technical document explaining their use of Boolean expressions & If statements in programming blocks using methods, classes, and object-oriented programming to perform arithmetic operations. b. Incorporate the previously created Pseudo Code to comment code blocks.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	1	2	3	4	
1	2	3	4				
	Demonstrate the use of arrays by analyzing and implementing one-dimensional arrays, loops, and debugging methods.	a. Create a presentation, blog entry, or other digital documentation explaining the use of arrays, loops, and debugging methods within the robot game program. b. Incorporate the Pseudo Code created previously to comment code blocks.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	1	2	3	4
1	2	3	4				

Each additional competency for all *FIRST* certificates follows the same protocol across all courses. All program competency profiles for listed certificates can be viewed in the final section of this application.

C. Assessment Plan

Explain how your instructors evaluate student progress towards mastery of your competencies. Do your students do projects or performances which can be evaluated? Do your students take tests or submit some kind of written work? Do your instructors determine mastery by careful observation of student participation in your program? These methods are examples of acceptable assessment practices. Describe what you will do in order to confirm student mastery of your competencies.

Student participants are evaluated by mentors with subject matter expertise in the subject area for which the student is being evaluated. There are a variety of methods through which students can demonstrate mastery. Some assessments allow students to verbally describe the activities and use of artifacts created by the team (give a verbal or digital presentation, create, and submit a digitally formatted report, or create and give or submit a digital presentation). Others involve mentor observation of individual tasks or comprehensive performance as part of the role the student plays on the *FIRST* team. Mentors will use both the student competency profile and corresponding rubrics like the one below to assess students mastery of the competency.

Course Name: Computer Science (1 Credit)
N.H. Code 306.44 – Computer Science Education
Effective: 9/2021

Empowered Learner			
Does the student present or provide evidence that they leveraged technology to choose, achieve, and demonstrate competency in their learning goals while assuming various roles and contributing to subgroups working collaboratively toward a common goal?			
Beginning – 1 point	Novice- 2 points	Proficient- 3 points	Mastery- 4 points
The student does not present or provide evidence that they leveraged technology while choosing, achieving, and demonstrating competency in their learning goals.	The student partially presents or provides evidence that they leveraged technology while choosing, achieving, and demonstrating competency in their learning goals.	The student fully presents or provides evidence that they leveraged technology while choosing, achieving, and demonstrating competency in their learning goals.	The student exceeds expectations presenting or providing evidence that they leveraged technology while choosing, achieving, and demonstrating competency in their learning goals.
Does the student present evidence of enriched learning through collaboration in a subgroup through use of digital tools?			
The student does not present evidence of enriched learning by collaborating effectively in a subgroup through use of digital tools.	The student presents some evidence of enriched learning by collaborating effectively in a subgroup through use of digital tools.	The student fully presents evidence of enriched learning by collaborating effectively in a subgroup through use of digital tools.	The student exceeds expectations presenting evidence of enriched learning by collaborating effectively in a subgroup through use of digital tools.
Engineering Design Process Rubric (Analyze a Challenge, Design a solution, Pseudo Code, Testing)			
How well did the student accomplish the engineering design steps and accomplish the assessment tasks?			
Beginning – 1 point	Novice- 2 points	Proficient- 3 points	Mastery- 4 points
The student does not accomplish the	The student partially accomplishes the	The student fully accomplishes the	The student exceeds expectations when

The mentor will use the following rating scale to evaluate each competency.

Ratings Scale: 1 Beginning; 2 = NOVICE (Information was covered in class, but student cannot demonstrate skill or knowledge without significant supervision); 3 = PROFICIENT (Student regularly demonstrates the knowledge or skill); 4= MASTERY (Student demonstrates successful completion of this skill numerous times without supervision.)

Students must perform a majority of tasks at the proficient or mastery level to receive course credit. Partial credits less than the identified amount per certificate will not be awarded. Students should carefully read all assessments early in the school year and use the provided rubrics for each course to understand the level of mastery they must demonstrate for each assessment. Students should plan which assessments they will attempt during the current season and which they will reserve for subsequent high school years. Most assessments will require significant advanced planning to ensure that all aspects of the assessment have been completed, either by the team or by the individual student performing the assessments. Students are responsible for demonstrating an understanding of all concepts as instructed by the competency/assessment, even if the work was a team effort. Many assessments provide an example or template that guide students toward successful completion. Students are encouraged to use the team's engineering notebook, portfolio, or other team artifacts such as *FIRST* award submissions when appropriate.

Using the performance assessment tool students will demonstrate satisfactory completion of the objective and coaches, mentors or teachers can send in the completed rating scales to *FIRST* New Hampshire for processing award certificates for successfully achieved competencies.

D. Communication of Student Progress

Describe how you keep students and their families informed of the students' progress towards achieving their certificates.

_____ Once a student begins participation in the *FIRST* through NH Learn Everywhere, they will have access to the student program competency profile. This document allows students, coaches, mentors, teachers and parents to actively monitor progress towards successful completion. Students can see the expected performance assessments, connected rating rubrics for each area they are seeking completion on this document.

Student Name: _____

Date: _____

**PROGRAM COMPETENCY PROFILE FOR CAREER TECHNICAL
EDUCATION
Career Cluster: General Business**

Course Name: Business Education – Business Technology (1 Credit)

N.H. Code 306.33 – Business Education Program

Effective: 9/2021

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<p>Students should carefully read all assessments early in the school year. Most assessments will require significant advanced planning and preparation by the <i>FIRST</i> Team and the individual student performing the assessments. Students are responsible for demonstrating an understanding of all concepts as instructed by the competency/assessment, though many artifacts are a team effort. Many Sample Performance Assessments below provide an example or template that guides students toward successful completion. Students are encouraged to use the Team’s engineering notebook, portfolio, or other Team artifacts such as <i>FIRST</i> award submissions as artifacts of evidence when appropriate. Teachers and coaches should assist students with planning, preparation, and managing achievable performance expectations.</p>							
Competencies (statement that provides the overview and defines the instructional area)	Knowledge, Content, and Skills (what a student needs to know and be able to do and upon which they will be assessed)	Sample Performance Assessments (Performance tasks the student needs to demonstrate to be rated proficient in meeting the competency)	*Rating Scale (Refer to course rubric)				
<p>Written Communication: Demonstrate an understanding of written communication by examining email and word processing software applications and using formatting to convey a message or information effectively.</p>	<p>Create and present formatted comprehensive emails or documents conveying a message to a specific audience for the desired result.</p>	<p>Create and present a formatted email addressing the 5 W’s and an H. For Example: Create an email inviting a sponsor to an event. Include comprehensive information to answer what will be happening, when the event is, where it will be, who will attend, why they want to know, and how they can get more information.</p>	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	1	2	3	4
1	2	3	4				
<p>Data Analysis: Demonstrate an understanding of the purpose of spreadsheets to inform decision-making by examining the formatting of</p>	<p>Create a spreadsheet to analyze test results and effectively communicate data results to inform design revisions.</p>	<p>a. Create and present verbally or digitally a spreadsheet formatted for clear readability to report data. b. Indicate the revisions based on the data, pointing out key information that informs decision-making. c. Use table formatting, emphasize bottom-line data, and include necessary text to communicate the message.</p>	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	1	2	3	4
1	2	3	4				

Key: Rating Scale: 1 NO EXPOSURE; 2 = NOVICE (Information was covered in class, but student cannot demonstrate skill or knowledge without significant supervision); 3 = PROFICIENT (Student regularly demonstrates the knowledge or skill); 4= MASTERY (Student demonstrates successful completion of this skill numerous times without supervision.)

Students will be able to plan demonstrations of competencies based on the roles they perform on their *FIRST* team throughout the season. Parents will be able to see progress on completed competencies and help support students as they attempt additional competencies. Mentors and teachers will use this form to document all student progress. These forms will be turned in the *FIRST* New Hampshire when completed for final evaluation to determine if a certificate will be awarded to the student.

