The Horticulture Program

CIP 01.0601

Instructor: Mark Vrabic
mvrabic@rmctc.org

Have Questions?
Contact: Mrs. Donna Henderson—School Counselor
Reading Muhlenberg Career & Technology Center
2615 Warren Rd
Reading, PA 19604
Telephone: 610-921-7313
Email: dhenderson@rmctc.org
READING MUEHLENBERG CAREER & TECHNOLOGY CENTER

MISSION STATEMENT

The Reading Muhlenberg Career & Technology Center, in partnership with our diverse community, sponsoring districts, and business and industry, is committed to providing quality career and technical education, resulting in opportunities for students to gain employment, pursue post-secondary education, and develop an appreciation for lifelong learning.

VISION STATEMENT

To empower Reading Muhlenberg Career & Technology Center students with the technical knowledge and skills to confidently pursue a career.

BELIEFS

- We believe in valuing the diversity of each student
- We believe education leads to opportunity
- We believe quality education starts with quality leadership
- We believe a career and technical education is a critical component of workforce development
- We believe technology is vital to learning and will help students connect with a rapidly changing world
- We believe technology must be embraced by teachers as a tool to help prepare students to meet current and future labor market demands
- We believe in providing all students with a positive educational experience
- We believe students should feel proud of what they have accomplished each day
- We believe students will be provided the opportunity to achieve their highest potential
- We believe students will be provided the opportunity to acquire and cultivate leadership skills
- We believe in providing students with a safe school environment
- We believe the success of a student is enhanced by parents and/or other influential adults through their support and involvement
- We believe in encouraging students to maintain a lifelong affiliation with the school
- We believe change is an ongoing process, not an event, and is fundamental for building quality programs of study
- We believe instruction must accommodate individual student learning styles
Dear Parent / Guardian:

My name is Mr. Mark A. Vrabic and I am the instructor for the Horticulture program (HRT) at the Reading Muhlenberg Career & Technology Center.

Over the next few weeks I plan to call all of my students’ parents in order to introduce myself and address any questions, concerns, or curiosities you may have.

I wish to welcome your son/daughter to the HRT program. The curriculum has been revised and will continually be updated with new trends in industry. Completion of this program can lead to a very exciting and productive career.

Please fill out this form with any preferences for my calling (i.e. time, day, email, prefer to call me, speaks only Spanish, etc.), and send it back with your son/daughter. If you have any questions or concerns, which you would like answered now, or if you would like to visit in person, do not wait, feel free to call me at school at (610) 921-7300 or contact me by email mvrabic@rmctc.org.

Sincerely,

Mark A. Vrabic

Best Time to reach you: ______________________________________

Phone number: _______________________________________________

Email: _______________________________________________________

Comments: ___________________________________________________

____________________________________________________________________

Student’s Name: _____________________________________________

Parent’s Signature: ____________________________________________

Date: _________________________________________________________

08/2010
Horticulture

- Discover the rewards of growing a variety of plants to feed your family and beautify your surroundings.
- Create unique floral designs for all occasions.
- Explore the many aspects of the landscape industry, including the operation of various types of equipment, development of water features, and the principles of landscape design.
- Become an innovative greenhouse grower specializing in production horticulture, aquaculture, and other sustainable environmental practices.

Job Titles – Career Pathways

11-9011.01 Nursery and Greenhouse Managers
27-1023 Floral Designers
37-1012 First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers
37-3011 Landscaping and Groundskeeping Workers
41-2031 Retail Salespersons
45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse
LOCAL Gardening Helper

CTC knowledge transfers to college credits at:
Harrisburg Area Community College
Pennsylvania College of Technology
Westmoreland County Community College

Student Certifications
NOCTI – National Occupational Competency Testing Institute Certification
* Applied Horticulture
OSHA Safety Certification
Instructor – Mr. Mark A. Vrabic

Biography
While attending high school, I discovered my love for growing and nurturing plants. As I continued my education through college, I began to mentor elementary students who visited our garden center. This process opened up my eyes to my passion for educating children. I continue to grow each year through the interaction with my students, learning as much from them as they learn from me.

Education
Allentown Central Catholic High School
Associates Degree, Biological Sciences, Northampton Community College
Bachelor’s Degree, Ornamental Horticulture, Delaware Valley College
Master’s Degree, Education, Gratz College

Certifications and Awards
Vocational Education II Teaching Certification, Temple University
CDL – Commercial Driver’s License

Work Experience
Landscape designer, garden center manager, business owner

Hire Date
1993

Community Service
FFA advisor
HBA
GHLRA board member
Girl Scouts
This document has been designed as a tool to facilitate student placement decisions and provides important information about the program. The chart on the reverse side is designed to assist in the identification of necessary skills, present educational levels, and supports, if any, that are needed to foster program success.

**Program Completion Requirements**

A successful student will...

- **Secondary Academic Course Requirements:** The PA Dept. of Education’s focus is to ensure every student is college and career ready, therefore all students are recommended to follow a college prep sequence of academic classes. Courses such as applied math or general science are not appropriate for this program. PDE’s goal is to have all students perform at the competent or advanced level on the Keystone Exams and Program of Study end-of-program assessment (NOCTI).
- Complete an Occupational Competency Assessment (i.e. NOCTI end-of-program exam) and score at the “competent” or “advanced” level. This end-of-program exam will cover the full scope of the program of study curriculum and includes (1) a multiple choice test and (2) a performance test consisting of occupational related tasks scored and evaluated by industry judges.
- Earn a minimum of one industry recognized certification. Students will be encouraged and expected to earn all recognized industry certifications that make up the scope of the curriculum. Accommodations are not permitted for industry certifications. These include: OSHA Certification.
- Complete the approved program curriculum and earn a minimum of one RMCTC Job Title aligned with the student’s career objective. Job titles are identified on the program task list, aligned with local workforce needs and high priority employment occupations, and annually reviewed and approved by the program’s occupational advisory committee.
- Successful completion of Keystone Exams as determined by sending school district.
- Maintain a 95% attendance rate or better.
- Transition on to a post-secondary institution, military or related fulltime employment aligned to their CTC program of study.

**Instructional Process/Specifications**

A successful student will...

- Perform a wide variety of tasks in a laboratory environment with equipment consistent with industry standards. Up to 25 students are assigned to work “independently” and in "small teams". Students progress through using learning guides in a self-directed manner.
- Working in the laboratory, students will be required to climb ladders and also use hand tools, power tools, power lawn care equipment & chemicals. Students will be required to properly handle and dispose of waste materials. This requires self-discipline and strict adherence to rules to ensure safety of self and others. The laboratory simulates a real working environment therefore students will be exposed to the noise levels, dust, debris, and fumes associated with the profession.
- Participate in classroom theory and laboratory applications for generally 2 ½ hours each day; students will spend 25% of their time in classroom theory and 75% of their time doing laboratory applications and live work.
- Participate in Career & Technical Student Organizations including HBA, SkillsUSA and/or National Technical Honor Society.
- Participate in a paid or unpaid work based learning related to the Program of Study (cooperative education, clinical internship, and/or job shadowing).
- Complete written and performance tests. Students will be evaluated weekly on occupational skill performance using rubrics. In addition, students will be evaluated daily on work ethics. Progress is measured by test performance, task completion and work ethic.
- Read and study internet programs and technical manuals. Most textbooks are written at a 10th to 11th grade level and most technical manuals are at a higher reading level.
- Complete homework on time. Homework typically involves chapter or workbook assignments, on line research assignments and writing assignments.
- Purchase appropriate work and safety attire, tools, and equipment.
<table>
<thead>
<tr>
<th>CTE Requirements</th>
<th>Present Educational Ability/Level</th>
<th>Support Needs</th>
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</thead>
<tbody>
<tr>
<td><strong>Program Completion</strong> – Strong self-determination skills and understanding of personal strengths and weaknesses. Ability to meet industry established standards of performance, complete the program of study without curriculum modifications, and earn industry certifications without testing accommodations.</td>
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<tr>
<td><strong>Reading &amp; Language Arts Level</strong> - Text and manuals written on a 10th - 11th grade reading level. Proficient on end-of-course exam (Keystone). Must have ability to read and comprehend work related documents and landscape plans. NOCTI assessment and industry certification exams require a proficiency in English language skills.</td>
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<td><strong>Math Level</strong> - At grade level and proficient on end-of-course exam (Keystone). Knowledge of arithmetic, algebra, geometry and their applications. Ability also needed to estimate and measure sizes, distances, and quantities; and determine time, costs, resources, and materials needed to perform a work activity.</td>
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<td><strong>Aptitude</strong> – Problem solving/diagnostic skills. Mechanical aptitude. Oral comprehension and expression, active listening, analytical thinking, and attention to detail. Artistic ability.</td>
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<td><strong>Safety &amp; Physical</strong> – Manual dexterity, multi-limb coordination while standing, sitting or lying down, arm-hand steadiness and finger dexterity. General body coordination and stamina that requires considerable use of arms, legs and whole body. High degree of self-discipline and focus needed for safety around moving equipment, hand tools, power tools and other equipment found in the industry. Physical strength and stamina with the ability to lift 50 lbs. overhead. Ability to work in all weather conditions, work independently, have good eye/hand coordination, color discrimination, no fear of heights or working in closed spaces.</td>
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<td><strong>Interpersonal/ Social</strong> - Ability to relate well to customers and coworkers; ability to work independently and as a team member; self-discipline a must due to safety issues; listening to what people are saying and understanding the points being made.</td>
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<td><strong>Other Occupational/Program Considerations</strong> - Learning and work environment includes use of various chemical and plant and landscape materials where students will be exposed to smells, dust, dirt and debris, loud and sometime startling noises, ongoing background noise, moving people and equipment, working inside and outside/environmental factors. Stamina and strength needed for lifting and prolonged standing, stooping, bending.</td>
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Scope and Sequence Horticulture 01.0601

Academic Subjects – Career success and postsecondary education success require the same level of college prep coursework. The Pennsylvania Department of Education’s (PDE) focus is to ensure that every student is prepared for college and a career. Academic courses such as applied math or general science cannot be listed on the program’s scope and sequence. PDE’s goal is to have all students perform at the competent or advanced level on the PSSA, and earn the Pennsylvania Skills Certificate on the end-of-program assessment.

<table>
<thead>
<tr>
<th>Subject (Hours)</th>
<th>Grade 9 (Hours)</th>
<th>Grade 10 (Hours)</th>
<th>Grade 11 (Hours)</th>
<th>Grade 12 (Hours)</th>
<th>First Semester</th>
<th>Second Semester</th>
<th>Third Semester</th>
<th>Fourth Semester</th>
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<tbody>
<tr>
<td>Horticulture Principles</td>
<td>Greenhouse Production</td>
<td>Floral Design</td>
<td>HRT 102 Horticulture Equipment Operation and Safety</td>
<td>HRT 121 Landscape Plants</td>
<td>HRT 216 Turf Management</td>
<td>HRT 226 Landscape Accessories</td>
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<td>Greenhouse Practices &amp; Production</td>
<td>Arrangements / Centerpieces</td>
<td>Landscaping</td>
<td>HRT 110 Soils and Fertilizers</td>
<td>CSCI 110 Introduction to Information Technology</td>
<td>HRT 219 Landscape Operations</td>
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<td>Floral Design</td>
<td>Landscaping</td>
<td>Sustainable Horticulture</td>
<td>HRT 113 Ornamental Plants</td>
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<td>Landscaping</td>
<td>Supervised Experience</td>
<td>OSHA Occupational Health and Safety</td>
<td>LRT 201 Technical and Professional Communication</td>
<td>HRT 225 Landscape Design</td>
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<td>Employability &amp; Leadership Skills</td>
<td>Job Seeking/Keeping Skills</td>
<td>Job Seeking/Keeping Skills</td>
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<td>English College Prep English 9</td>
<td>College Prep English 10</td>
<td>College Prep English 11</td>
<td>College Prep English 12</td>
<td>English 111 English Composition I</td>
<td>ENL 201 Technical and Professional Communication</td>
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<td>Math Algebra</td>
<td>Algebra II</td>
<td>Geometry</td>
<td>Trigonometry</td>
<td>MTH 124 Technical Algebra and Trig</td>
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<td>Science Accelerated Integrated Science</td>
<td>Biology</td>
<td>Chemistry</td>
<td>BIO 111 Basic Botany</td>
<td>FIT Fitness and Lifetime Sports</td>
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<td>Humanities Citizenship</td>
<td>World Cultures</td>
<td>American History I</td>
<td>American Government</td>
<td>Social Sciences Elective</td>
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<td>Other Physical Education</td>
<td>Physical Education</td>
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<td>Health</td>
<td>Health</td>
<td>Driver's Ed. Theory</td>
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SAFETY
Identify and follow all general safety, laboratory safety and field-site safety practices and procedures in horticulture.
Identify and follow all OSHA safety standards for the horticulture services industry.
Identify and follow procedures written in the Safety Data Sheet (SDS) information system.
Operate horticulture equipment.
Select the proper protective clothing and equipment.

SAFE AND PROPER PLANT HEALTH CARE PRACTICES
Control weeds, insects, and plant diseases.
Interpret horticulture product labels.
Calculate and mix quantities of horticultural products used in plant health care.
Define the concept of "Plant Health Care" such as disease, nutrients, etc.
Distinguish the components of an Integrated Pest Management program including the effects of chemicals and pesticides on the environment.
Identify various horticultural pests including their signs and symptoms.
Prepare for PA Pesticide Certification.

BASIC BOTANY
Describe the process of photosynthesis, respiration, translocation, and transpiration.
Identify plant cell structure, organization, and function.
Identify plant structures and explain their functions.
Identify conditions essential for seed germination.
Explain the environmental factors that affect the growth and development of a plant.
Distinguish between sexual and asexual plant reproduction.
Identify plant nutrient requirements.
Describe the nutrient cycles.
Classify plants and use appropriate binomial taxonomic terminology.
Describe techniques used to control environmental factors.
Describe how weather and climate impact growing conditions and plant selection.

HORTICULTURE BUSINESS OPERATIONS
Determine criteria for selecting a site for a horticulture business.
Research state and local requirements for horticulture businesses.
Develop a horticultural business plan.
Analyze pricing and mark-up techniques.
Determine human resource needs and business ethics in a horticulture business.
Research vendors to obtain product information.
Perform appropriate customer/client relationship attributes.
Identify and develop various horticulture record keeping systems.
Analyze record keeping system to determine best management practices.

SOILS AND FERTILIZER
Identify and describe soil characteristics.
Identify soil and/or plant nutrients.
Describe soil management techniques.
Conduct proper soil sampling techniques.
Test soil for pH, texture, macronutrients, and soluble salts.
Interpret commercial soil test reports.
Describe criteria for selecting fertilizers and soil amendments.
Describe factors influencing fertilizer application.
Identify current issues regarding plant and soil management that impacts agronomic and horticultural practices.

SUSTAINABLE HORTICULTURE
Identify different methods of sustainable horticulture.
Compare sustainable watering and fertilizing techniques to conventional techniques.
Compare sustainable plant material selection to conventional plant material.
Recycle horticultural waste.

HORTICULTURE TECHNOLOGY
Explain the uses of technologically altered plants.
Research advanced and emerging technologies in horticulture.
Perform a Point of Sale (POS) transaction.

HISTORY AND CURRENT STATUS OF HORTICULTURE
Describe major historical developments in the field of horticulture.
Compare/contrast the effect human beings have had on various plant species.
Determine how development of certain plant species has affected cultural development.
Describe the role horticulture plays in the economy of the state and nation.
Critique the impact of that botanical gardens, public parks, and plants have on people in a society.
PLANT IDENTIFICATION
Outline the proper use of plant material in various segments of the horticulture industry.
Determine the impact of environmental factors on plant materials.
List the identifying characteristics of various plant categories including woody and herbaceous plants in the horticulture industry.
Identify 100 plants used in horticulture industry by horticultural reference/botanical reference. (70 need to be deciduous evergreen annuals perennials and house plants)

HORTICULTURAL CAREERS AND OPPORTUNITIES
Describe careers and working conditions in the Horticulture industry.
Perform job readiness skills needed in the Horticulture industry.
Research horticultural industry certifications.
Explore post-secondary opportunities.

HORTICULTURAL PATHWAYS
Describe and apply principles of landscape hardscape or floral design.
Create various horticulture designs.
Calculate measurements areas and volumes of horticulture designs.
Read and interpret landscape design symbols and abbreviations.
Transplant various types of plant material.
Prune various types of plant material.
Describe the characteristics of lawn/turfgrass installation and maintenance.
Describe the characteristics and features of various types of growing structures.
Prepare plant material for marketing or sales.
Recognize non-traditional growth and propagation of various plant materials. (Examples may include but not limited to hydroponics aquaponics aeroponics and tissue culture.)

VALUE ADDED
80.1 - Establish Career Goals.
80.2 - Complete Job Application.
80.3 - Compose Resume.
80.4 - Prepare for Job Interview.
80.5 - Compose Employment Letters.
80.6 - Participate in Online Job Search.
80.7 - Prepare Career Portfolio.
STUDENTS OCCUPATIONALLY & ACADEMICALLY READY

● Earn college credits which will save you money on tuition
  ● Shorten college attendance
  ● Get on the right career path
  ● Enter the job market prepared
  ● Get a consistent education
● See your CTC School Counselor for More Information

TO QUALIFY CTC STUDENTS MUST:
1. Earn a high school diploma, achieve a minimum 2.5 GPA on a 4.0 scale in your CTC program and complete the PDE approved Program of Study.
2. Earn the industry certifications offered by your program (if applicable).
3. Achieve Competent or Advanced on the NOCTI End of Program Assessment.
4. Achieve proficiency on ALL of the Program of Study Competency Task List.
5. Provide documentation to Postsecondary Institution that you have met all of the requirements!

Find out more about the colleges offering course credits you can earn while attending RMCTC. Go to collegetransfer.net, search: PA Bureau of CTE SOAR Programs, and find your program by CIP Code.

*To receive college credits, qualifying students have three years from their date of graduation to apply and matriculate into the related career and technical program at a partnering institution.
Horticulture
Classroom Rules

**Classroom**
1. No student shall leave the classroom without the teacher’s permission.
2. One student will be permitted out of the classroom at a time to go to the nurse’s office.
3. The teacher will dismiss the class *NOT* the bells. All clean up jobs must be completed to the teacher’s satisfaction before the class is dismissed.
4. Swearing will *NOT* be tolerated.
5. Disrespect to the teacher will *NOT* be tolerated.
6. Parties are *NOT* allowed in class except those authorized by administration.
7. All rules of the RMCTC discipline code will be enforced.
8. If you are absent it is *YOUR* responsibility to obtain the makeup work.
9. Proper work clothes shall be worn when required.
10. **Teachers’ Desk, Cabinets and Computer are OFF LIMITS to students. FAILURE FOR THE DAY AND IN SCHOOL SUSPENSION WILL RESULT IF A STUDENT IS SEEN AT THESE AREAS. NO WARNINGS, NO EXCEPTIONS!**
11. Follow safety instructions at all times.

**Greenhouse**
1. No sitting or standing on the benches.
2. Soil is not to be dumped on the floor.
3. Hose nozzles are to be picked up off the floor.
4. Tools are always put away.
5. All areas are to keep clean.
6. **NO STUDENT SHALL TOUCH ANY OF THE CONTROL PANELS IN EITHER GREENHOUSE. IF plants are lost because of a student resetting a greenhouse thermostat and plants are killed as a result of this action, the student will be liable for the retail cost of replacing the damage plants.**

**Ground Rules**
1. You are permitted outside only if the activity you are doing takes you there.
2. Proper clothing must be worn in order to participate in landscape activities. (Leather boots, long pants, work shirt)
3. Following a task, all equipment is to be returned to its proper place and the area cleaned.

I have read these rules and have had them explained. I understand the consequences for breaking these rules – be it a verbal warning, demerits in accordance with the discipline code, written reports, or being sent to the office.

Student signature and Date ___________________________ Parent signature and Date ___________________________

08/10
Policy for Personal Belongings in Horticulture

When entering the classroom please place your belongings inside your locker. These include coats, book bags, MP3 players, cell phones and anything you may be carrying. This policy is to ensure that YOUR personal belongings are kept safe and secure.

Cell phones and MP3 players are to be turned off and placed in your lockers. Keeping them in your pockets is not acceptable. If they are seen you will be asked to turn them in to the teacher and a parent or guardian can pick them up in the main office after school.

This policy is not only for our classroom but is school wide. Please follow these rules and we will have a great year.

Thank you,

Mark A. Vrabic
Horticulture Instructor

I have read these rules and had them explained to me.

____________________________________  __________________________________
Student Signature and Date                  Parent/Guardian Signature and Date
Horticulture Uniform Policy

Horticulture students are required to wear a uniform on a daily basis. During warmer weather shop tee shirts must be worn no matter which career focus you are enrolled. During the colder times of the year, an RMCTC logoed sweatshirt may be worn over your street clothes.

If you are in the landscaping career path, long work pants and work boots are required. Leather sneakers may be permitted for some activities when outside work is not required (this is at the discretion of Mr. Vrabic).

Floral and greenhouse students must wear tee shirts or sweatshirts. Aprons will be provided for these two career paths.

RMCTC Tee shirts and sweatshirts may be purchased on the school website or ordered from Mr. Vrabic in September. Students that do not comply with this policy are subject to the punitive policies of RMCTC dress code discipline.

Thank you,

Mark A. Vrabic
Horticulture Teacher
Horticulture
Grading System

The grade you receive in the class will be based on two basic areas:
1. Work Ethics  2. Knowledge

**Work Ethics**  This portion of your grade counts as 60% of your total grade. This grade is derived from a daily grading system. I will base your work ethic grade on a scale of 0 – 10. You will start each day with 10 points and points will be deducted according to violation to safety practices, poor workmanship, etc.

Points will be deducted for the following violations:

- **SAFETY VIOLATIONS:**
  - 1\textsuperscript{st} Warning: 5 points
  - 2\textsuperscript{nd} Warning: 10 points

- **OTHER VIOLATIONS**
  - Wasting Time 1\textsuperscript{st} Warning: 3 points
  - Wasting Time 2\textsuperscript{nd} Warning: 5 points
  - Failure to clean up: 5 points
  - Foul Language: 3 points
  - Off Task: 3 points
  - Disruptive Behavior: 3 points
  - Dangerous Work Habits: 10 points
  - Will not work with others: 2 points
  - Not reliable or dependable: 2 points
  - Wasting Materials: 3 points
  - Purposely-destructive: 5 points
  - Improper Use of Tools: 2 points
  - Absent: 10 points
  - Sitting at the teachers desk: 10 points

**Knowledge**  The knowledge portion of your grade is derived from test, assignment and project averages. This will count as 40% of your grade. Tests, assignments and projects will be given at regular intervals throughout the school year. Homework assignments, which are not handed in, will count as failures. Tests, which are not made up will also count as failures. It is your job to do the assignments and be sure to take the tests.

**Make up work for Absences:**  Students have the opportunity to make-up work due to an illness/being absent from school **PROVIDED** their absence is **excused**. Students must submit make-up work within the following timelines:
- One (1) to three (3) days excused absences – five (5) school days to complete assigned work.
- Four (4) or more days excused absence – ten (10) school days to complete assigned work.

*All work missed through unexcused absences will be graded as a zero.*

Parents / Guardian Signature and Date

Students Signature and Date

08/2010
GRADE REPORTING

**Purpose:** The intent of this grading procedure is to provide a student grade that accurately reflects student achievement. Progress is measured in the areas of work ethics, knowledge and the practical skills aligned to the program area learning guides. Student performance for leaning guide activities and assignments are reflected in the knowledge grade. Students will be evaluated according to established program standards on an individual basis. The ClassMate grading software automatically calculates student grades using the following formula:

\[
\text{Work Ethic} \times 40\% + \text{Knowledge} \times 60\% = 100\%
\]

Teachers must be able to justify grade percentages in the event of inquires or concerns.

**Interpreting a Grade:**

**Work Ethics Grade (40%):** Each school day, every student receives a Work Ethics or daily grade. Criteria that comprise these grades are safety, student behavior, preparation/participation, productivity or time on task, professional appearance and extra effort. The Work Ethics grade range is based on a 0 to 10 model that students may earn each day depending on how many criteria they satisfactorily meet.

**Knowledge Grade (60%):** Throughout the marking period, a student’s cognitive knowledge about various career-specific topics will be evaluated and recorded by the instructor. Examples of knowledge activities include: lab/shop assignments, homework, quizzes, tests, and research activities. The Knowledge grade range is based on actual points earned divided by the total accumulative points.

**Skill (Learning Guide):** A task list guides every RMCTC program. Tasks are evaluated on a 0-5 scale with a 4 or 5 considered proficient. Learning guides are normally aligned to lab assignments or shop projects where a student will physically perform a task. The student and teacher will discuss, at the beginning of each quarter, student expectations and the required tasks that must be completed or “contracted” by the end of the marking period. This allows a student to work productively with the expectation to make constant progress during the marking period. All assignments, activities and rubrics associated with learning guides are documented in the “knowledge” grading component. It is important to note that poor productivity will have a negative impact on a student’s grade.

**NOTE:** For the purpose of students earning a job title associated with their program area, teachers track students’ skill/task work. Teachers identify specific criteria to evaluate each task performed, ranging from a 0 to 5 (not completed to mastery). Students must earn a 4 or 5, in order to credit the task towards earning the specific job title. Students have the opportunity to revisit a task multiple times until successfully receiving credit. The job titles a student earns will be listed on the student’s RMCTC certificate that is awarded at Senior Recognition Night.

**CTC Letter Conversion Table**

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<thead>
<tr>
<th>Grade</th>
<th>Letter</th>
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<tbody>
<tr>
<td>100 – 97</td>
<td>A+</td>
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<tr>
<td>96 – 93</td>
<td>A</td>
</tr>
<tr>
<td>92 – 90</td>
<td>A-</td>
</tr>
<tr>
<td>89 – 87</td>
<td>B+</td>
</tr>
<tr>
<td>86 – 83</td>
<td>B</td>
</tr>
<tr>
<td>82 – 80</td>
<td>B-</td>
</tr>
<tr>
<td>79 – 77</td>
<td>C+</td>
</tr>
<tr>
<td>76 – 73</td>
<td>C</td>
</tr>
<tr>
<td>72 – 70</td>
<td>C-</td>
</tr>
<tr>
<td>69 – 65</td>
<td>D</td>
</tr>
<tr>
<td>64 – under</td>
<td>F</td>
</tr>
</tbody>
</table>
GRADE REPORTING (continued)

Final Grade average is based on the student's four (4) numerical marking period grades. The final average will directly align to the letter conversion table listed above.

If a student has three (3) marking period grades of "F" the teacher shall give appropriate consideration to that student not passing for the year. If a student is on an upward trend at the end of the school year, this may justify having the student pass for the year. If the opposite is true, and the student is on a downward trend, the student should receive a failing grade.

The individual teacher must evaluate each student's achievement in terms of the expected goals for their program area.

Failure to complete assignments, frequent lateness or absence, and demonstrated indifference to school are major contributors to student failure. Blatant refusal to attempt or to complete a significant number of course requirements may, by itself, justify a final course grade of "F".

The following divisions are given as a guide to recording and interpreting the grading system. It remains for each teacher to objectively and fairly rate each student, not based upon personality, but performance.

**Determination of Grades:** Teachers will give thorough consideration using all grading components in determining students' grades to both class work and test results.

**A = Excellent**
1. This grade represents superior work and is distinctly an honor grade.
2. The excellent student has reached all course objectives with high quality achievement.
3. The excellent student displays unusual effort and works willingly and effectively in reaching required objectives.

**B = Good**
1. This grade represents above average quality achievements.
2. The good student has reached a large majority of course objectives.
3. The good student is industrious and willing to follow directions.

**C = Average**
1. This grade represents satisfactory achievement.
2. The average student has reached a majority of course objectives.
3. The average student is cooperative and follows directions, yet extra effort and improvement are needed for more complete mastering of the material.

**D = Passing**
1. This grade represents a minimally satisfactory achievement.
2. The student is performing below-average work and has not reached a majority of course objectives.
3. This achievement level indicates there is a great need for improvement, daily preparation and improved dedication and attendance.

**F = Failure**
1. This grade represents unsatisfactory achievement.
2. The failing student has not reached necessary course objectives.
3. The failing student has not attempted to complete assignments, is constantly late or absent, and generally has failed to accomplish the fundamental minimum essentials necessary in the program area.
4. It may be noted that generally a student does not fail because of a lack of ability; failure may be caused by idleness, non-dedication, or a general disregard to directions of the teacher and the unwillingness to use whatever ability he/she possesses.

**Incomplete Grades:** Incomplete grades must be updated no later than ten (10) days from the close of the marking period. As soon as the work is completed and the grade is available, it must be reported to the appropriate person.

**Failures:** Students who receive a failing final grade in a program area are permitted to repeat that program, but are urged not to do so for obvious reasons. If this situation presents itself, students and
parents are advised to consider an alternative program which is probably more suited to the student's true interests and aptitudes and not merely satisfying a short-term or unrealistic desire.

**Attendance and its Impact upon Grades:** The importance of regular school attendance and its positive impact upon a student's performance grade cannot be overstated. If a student is absent, he or she does not have the opportunity to keep pace with their classmates and must work independently to acquire the information missed during any absence. Regardless of how well a student performs when he/she is present, habitual absenteeism usually results in a failing performance grade. This situation is not unlike the conditions of the business or industry for which the student is being trained.

**Make up Work for Absences:** Students have the opportunity to make-up school work due to an illness/being absent from school. **PROVIDED** their absence is **excused**. Students must submit make-up work within the following timelines:

1. One (1) to three (3) days excused absences – five (5) school days to complete assigned work.
2. (4) or more days excused absence – ten (10) school days to complete assigned work.

All work missed through unexcused absences will be graded as a zero.

**Report Cards (see Progress Reports):** Students will receive a report card from the sending school district which will reflect the student’s grade from their Career & Technology classes. In addition, grades are available on the parent portal.

**Student Recognition Night:** Reading Muhlenberg Career & Technology Center hosts an annual Student Recognition Night, which honors our senior students. During this event, senior students in attendance are recognized and may also receive awards that they have earned relevant to their accomplishments while attending Reading Muhlenberg CTC.
All students enrolled in Reading Muhlenberg Career & Technology Center have the opportunity to participate in at least one Career & Technical Student Organization (CTSO) while enrolled at the CTC. Students who become members in these co-curricular organizations have the opportunity to participate in team building, leadership, community service and social events. Students also have the opportunity to attend skill competitions where the skills they have learned are "put to the test" against other competitors. These competitions include testing of knowledge and hands-on skills in a variety of trade and leadership events. Students who are fortunate enough to win their events at a district or state competition are able to compete at the national level and travel to locations such as Louisville, KY, Kansas City, MO, San Diego, CA, Orlando, FL, and Cleveland, OH.

SkillsUSA

SkillsUSA is a national organization of students, teachers and industry representatives who are working together to prepare students for careers in technical, skilled and service occupations. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship and character development. It builds and reinforces self-confidence, work attitudes and communications skills. It emphasizes total quality at work, high ethical standards, superior work skills, life-long education, and pride in the dignity of work. SkillsUSA also promotes understanding of the free-enterprise system and involvement in community service.

National Technical Honor Society (NTHS)

NTHS is the acknowledged leader in the recognition of outstanding student achievement in career and technical education. Over 2000 schools and colleges throughout the U.S. and its territories are affiliated with the NTHS. Member schools agree that NTHS encourages higher scholastic achievement, cultivates a desire for personal excellence, and helps top students find success in today's highly competitive workplace. NTHS members receive: the NTHS membership certificate, pin, card, window decal, white tassel, official NTHS diploma seal, and three personal letters of recommendation for employment, college admission, or scholarships. Students will have access to our online career center including these valuable services: MonsterTRAK, Wells Fargo, Career Safe, and Career Key.
The FFA

www.ffa.org

FFA is an association of agriculture students dedicated to making a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. Any student enrolled in the horticulture shop is eligible for membership. Students have the opportunity to compete at a district, state and national level. Our motto is: Learning to Do, Doing to Learn, Earning to Live, Living to Serve.

Home Builders of America (HBA)

http://www.pabuilders.org/

The purpose of the HBA Student Chapter Program is to give students first hand exposure to the “real world” of the building industry and an invaluable complement to their academic studies.
WORK BASED LEARNING
Cooperative Education & Internships
RULES / GUIDELINES

1. All Work Based Learning (WBL) students must have school WBL forms completed and sign up for the school Remind App before starting the job/internship. Any student who is less than 18 years of age must also have a transferable work permit.

2. **ABSENT FROM SCHOOL?????? – NO WORK!!!!!!!**
   - If you are absent from school in the morning, you may **NOT** go to work in the afternoon. **YOUR JOB IS PART OF YOUR SCHOOL DAY.** If you are at a medical, social service, or court appointment in the AM, you **may** go to work that day. However, you must bring a note from the agency where you were, to your attendance secretary, the next school day.
   - If you are ill, YOU must call your employer to inform him/her that you will not be reporting for work.
   - **IMPORTANT:** If your name is going to appear, for any reason, on your sending school absentee list, you must also **report off to Mrs. Albarran @ 610-921-7301. Failure to report off may result in removal from WBL.**
   - If **school is closed** for a holiday, in-service day, or a snow day, you **DO** go to work on those days, if you are scheduled. If you are not scheduled, you can work additional hours if your employer allows you to work. Labor Laws need to be followed.
   - If you are suspended **out of school**, you may not work at your WBL job. This includes jobs that are scheduled with after school hours.
   - **REPETITIVE ABSENCES** at school or work will result in your removal from Work Based Learning.

3. All WBL students are required to **report to the CTC every Monday.** Any additional classroom time is at the discretion of your program area teacher. You are responsible for communicating this to your employer. On the **first Monday of each month** or **the first day, you are at RMTC for the month**, you must report to the **Work Based Learning Office**, where you will sign in with Mrs. Hughes. Co-op students will record hours and earnings, and then return to your program area for the remainder of the school day. **Do not forget to bring your check stubs to record your hours and earnings!** Internship students will record hours. If you miss two monthly meetings, you will be removed from WBL.
   - Any violations of these rules will result in the following **discipline action:**
     - 1st violation – VERBAL WARNING
     - 2nd violation – REMOVAL FROM WORK BASED LEARNING

4. When at work, you are guided by and are responsible to your employer. Be sure to follow all of the Employers’ rules and regulations because you will be terminated for the same reasons as any other employee. Upon your first week of work, obtain a contact number in case you need to call your supervisor.

5. If your work experience is terminated for any reason, you must return to school the next day, and inform your CTC teacher and the Work Based Learning Coordinator.

6. If you wish to terminate your employment, you must discuss this with your teacher and the Work Based Learning Coordinator, and leave the job properly by giving the employer a two-week notice and a letter of resignation.

7. If you have any questions concerning the rules and guidelines of Work Based Learning, please contact the WBL coordinator at 610-921-7337.

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STUDENT SIGNATURE

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PARENT/GUARDIAN SIGNATURE