



www.rmctc.org

The Horticulture Program

CIP 01.0601

Instructor: Mark Vrabic

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Have Questions?

Contact: Mr. Mark Tobias – School Counselor
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Prices listed are subject to change.

* *Additional information about these items can be found in the Student Handbook*

It is the policy of Reading Muhlenberg CTC not to discriminate on the basis of sex, handicap, race and national origin in its educational and vocational programs, activities, or employment as required by the Title IX, Section 504, and Title VI.

READING MUHLENBERG 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

HORTICULTURE – HRT

- 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 & 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

- * Floriculture
- * Greenhouse
- * Landscaping

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 to educate 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 in Biological Sciences from Northampton Community College
Bachelor's Degree in Ornamental Horticulture from Delaware Valley College
Master's Degree in Education from Gratz College

Certifications & 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



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



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 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 ST Warning	5 points
2 ND Warning	10 points

OTHER VIOLATIONS

Wasting Time 1 st Warning	3 points	Will not work with others	2 points
Wasting Time 2 nd Warning	5 points	Not reliable or dependable	2 points
Failure to clean up	5 points	Wasting Materials	3 points
Foul Language	3 points	Purposely-destructive	5 points
Off Task	3 points	Improper Use of Tools	2 points
Disruptive Behavior	3 points	Absent	10 points
Dangerous Work Habits	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 will be measured in the areas of work ethics, and knowledge. All activities and assessments that are required as the student progresses through their skills (learning guides) will be reflected within 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:

Work Ethic 40%
Knowledge 60%
100%

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

Interpreting a Grade: The two levels of evaluation are described below:

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.

NOTE: Impact of Absenteeism, Tardiness/Early Dismissals - The direct effect of absenteeism on a students' grade will be through the Work Ethic component of the grading formula. If a student is Tardy or has an Early Dismissal the Work Ethic grade will automatically be defaulted to a five (5) from a possible ten (10) points. The instructor may change this value as they see fit.

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.

Task tracking: For the purpose of students earning a job title associated with their program are, 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.

GRADE REPORTING (continued)

CTC Letter Conversion Table Grade Letter

100 – 97 A+
96 – 93 A
92 – 90 A-
89 – 87 B+
86 – 83 B
82 – 80 B-
79 – 77 C+
76 – 73 C
72 – 70 C-
69 – 65 D
64 – under F

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.

GRADE REPORTING (continued)

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 **acceptable** quality achievements.
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 **minimum acceptable** quality 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 **unacceptable** quality achievements.
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 laziness, 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.

GRADE REPORTING (continued)

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. 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

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 program. Students will also receive a report card from RMCTC reflecting their program grade and Social Studies grade, where applicable. In addition, grades are available on the parent portal.

Senior Recognition Night: Reading Muhlenberg Career & Technology Center hosts an annual Senior Recognition Night, which honors our senior students. During this event, all senior students in attendance are recognized and may also receive awards that they have earned relevant to their accomplishments while attending Reading Muhlenberg CTC.

PARENT PORTAL: The Parent Portal is available for parents/guardians to view your child's progress by accessing the RMCTC District Portal on the School's web-site; www.rmctc.org. This will give you up to date information related to your child's attendance, grades (work ethic and knowledge), discipline referrals and schedule. In order to use this resource, you must provide the CTC with a current email address and register online.

Log onto www.rmctc.org, click on "**Parents**", then click on "**parent portal**" which will navigate you to the link where you will log into the portal. You will have to "**create an account**" on your first visit to the portal by using your email address (you need to use the email address you provided us on your child's application) and setting up a password. Once registered you may return at any time to view your child's information. Please utilize our website, to track your child's progress by viewing their grades and attendance, along with any discipline action. In addition you will be able to review your child's report cards & progress reports as soon as they are available. You also have the ability to select the option to receive email notifications for specific instances that you choose. You can choose to receive an email automatically if your child is absent/tardy or both, if your child receives a discipline referral or suspension and if your child receives a specific grade.



Reading Muhlenberg CTC
2615 Warren Road
Reading, PA 19604
(610) 921-7300

Student Progress Report - MP 1

Student Name:

Student Address

Reading, PA

Progress Report # : 1
 Sending School:
 Location: Reading Muhlenberg CTC
 Enrollment Date:
 Course:
 Class:
 Instructor:
 Grade:

Questions regarding this report can be answered by calling your child's teacher at (610) 921-7300. If the teacher is not available when you call, please leave your name and telephone number and your call will be returned.

Your child's progress in this class is:

Grade to Date: As of

Knowledge:

Knowledge Comments / Recommendations:

Skill Comments / Recommendations:

Work Ethic/PDP Comments/Recommendations

<u>Attendance Report</u>	<u>Excused Absences</u>	<u>Unexcused Absences</u>	<u>Unexcused Tardy</u>
Year To Date Totals	0.00	0.00	0.00
Current marking period	0.00	0.00	0.00

Instructor's Signature: _____

Issue Date:

Student's Signature: _____

Sign Date: _____

Parent's Signature: _____

Sign Date: _____

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2615 Warren Road
Reading, PA 19604
(610) 921-7300

School Year

ANNUAL EDUCATIONAL AND OCCUPATIONAL OBJECTIVES FOR STUDENTS ENROLLED IN A PDE-APPROVED CAREER AND TECHNICAL EDUCATION (CTE) PROGRAM

INSTRUCTIONS: This form is to be completed each year by students enrolled in a Pennsylvania Department of Education (PDE) approved CTE program with the intent to take further technical instruction offered by the program to achieve a related occupational objective. The scope and sequence for the PDE approved program serves as the educational plan.

Form is to be completed by student and verified and signed by the instructor and guidance /career counselor:

STUDENT'S NAME:

Gender: Birthdate: Current Grade:

SECONDARY SCHOOL OFFERING APPROVED CTE PROGRAM: Reading Muhlenberg CTC

SENDING SCHOOL DISTRICT (for CTCs/AVTSs/Charter Schools):

This student is enrolled in technical instruction offered by the following approved CTE program and associated Classification of Instructional Program (CIP):

PROGRAM NAME: Applied Horticulture/Horticultural Operations, General CIP Code: 010601

1. Is student enrolled in approved Tech Prep/Program of Study (POS) program technical instruction? Yes or No (Circle one)

2. If yes, is student taking minimum academic coursework per approved Tech Prep/POS program scope and sequence? Yes or No (Circle one)

3. Student's plans following high school graduation include: (Check all that apply) Yes or No (Circle one)

Employment or Military service/training - Specify Branch
Postsecondary education: College Technical School / Proprietary School

4. Student's program-related occupational objective:

Career Pathway

As a student enrolled in this program, my career objective is to prepare for and explore the following career pathway(s).

- Checkboxes for: Farmworkers & Laborers, Crop, Nursery, & Greenhouse; Floral Designers; Local - Gardening Helper; Program of Study - SOAR; First-Line Supervisors/Managers of Landscaping, Lawn; Landscaping & Groundskeeping Workers; Nursery & Greenhouse Managers; Retail Salespersons

*This information is not auditable by the Office of Auditor General. I understand that this information will become part of my permanent file with Reading Muhlenberg CTC, 2615 Warren Rd., Reading, PA 19604. I also understand that this information will be forwarded to my home school district counseling office.

Student's Signature Date

Instructor's Signature Date Counselor's Signature Date

It is the policy of Reading Muhlenberg CTC not to discriminate on the basis of sex, handicap, race and national origin in its educational and vocational programs, activities, or employment as required by the Title IX, Section 504, and Title VI.

Boxed text: Pennsylvania State Board of Education, Chapter 4 Section 4.31(e) states that a student's record shall include the student's educational and occupational objectives. This form (PDE-408) or similar, locally developed form must be completed and signed each school year by the student enrolled in planned technical courses/instruction offered by the program and must be maintained in school files. The Office of the Auditor General will review student records to determine if the technical courses/instruction taken by the student coincide with the planned courses/instruction documented for the approved CTE program.

01.0601 Applied Horticulture/Horticultural Operations, General Horticulture

Orientation

Complete orientation activities.
Demonstrate general shop safety and OSHA safety standards & first aid.
Demonstrate the safe use of tools.
Explain the important implications of the horticulture field.
Explain the importance of the Horticulture Industry and historical developments associated with Horticulture.
Explain the environmental impacts of Horticulture.
Explore career opportunities in Horticulture.
Demonstrate practicing Horticulture safely.

Basic Horticulture Principles

Classifying ornamental plants while identifying the most popular used in the Horticulture industry.
Identify and describe root anatomy.
Identify and describe stem anatomy.
Identify and describe leaf anatomy and morphology.
Identify and describe flower anatomy.
Identify and describe plant physiology.
Identify and describe the effects of light, temperature, air and water on plant growth.
Examine plant propagation including new techniques and technologies available.
Identify and describe plant growth regulators.
Identify and describe integrated pest management and Plant Health care.
Identify and describe the kinds of pesticides.
Use pesticides safely.
Interpret pesticide labels.
Demonstrate proper application of pesticides.
Manage the environmental impact of pesticides.
Identify and manage plant pests in the greenhouse.
Identify and manage plant pests in the landscape.
Identify and manage plant pests in fruits and vegetables.

Greenhouse Practices and Production

Identify and describe the properties of growing media, including soil sampling and management techniques.
Identify and describe growth media components.

Explain the supply of nutrients to plants, including PH, texture, macronutrients and soluble salts.
Explore greenhouse structures.

Control the greenhouse climate properly.
Use automated systems in the greenhouse.
Grow Poinsettias.
Grow potted Chrysanthemums.

Grow minor potted flowering crops.
Growing and force Easter Lilies.
Grow and force spring bulbs.
Grow foliage plants.
Grow bedding plants.
Grow potted perennials.
Describe important aspects of the greenhouse business.

Floral Design

Explain the structure and mission of the International Flower Market.
Demonstrate proper care for fresh cut flowers and foliage.
Identify floral design tools and supplies.
Demonstrate knowledge of the principles of floral design.
Demonstrate knowledge of design elements.
Design Corsages and Boutonnieres.
Design basic floral work.
Design vase arrangements.
Design centerpieces.
Design Holiday arrangements.
Design Wedding pieces.
Design sympathy arrangements.
Use everlasting flowers.
Price floral design work.
Manage the floral shop.

Landscaping

Demonstrate knowledge of nursery production facilities, crops and the business.
Analyze the residential landscape.
Design landscape areas.
Choose plants for the landscape.
Prepare the landscape plan.

Describe concepts involved in managing the landscape business.
Prepare the landscape installation.
Install and maintain irrigation systems.
Install woody landscape plants, groundcovers, perennials and annuals.
Install patios, walks and decks.
Install fences and walls.

Incorporate water features into the landscape.
Identify, establish and manage turfgrass.
Manage pests and diseases in turfgrass.
Identify tools and equipment associated with turfgrass.
Water, fertilize, mulch, and prune landscape plants.
Use and maintain tools and equipment and explain the purpose of "One Cell" service.

Employability in the Horticulture Industry.

Develop personal skills.
Develop communication skills.
Gain employment.

Supervised Experience and Leadership Skills in Horticulture - FFA

Determine purposes and procedures of SAE.
Plan and develop SAE programs.
Expand my SAE.
Explain the history of the FFA.
Recognize opportunities in FFA.
Develop Leadership Skills.
Participate in community and government organizations.

Demonstrate knowledge of 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.
Compare the efficiency of current energy sources with future energy sources in horticulture.

OSHA

Complete OSHA training.

Employability Skills.

Establish career goals and develop a plan to meet goals.
Complete a job application.
Compose a resume, reference list and cover letter.
Prepare for a job interview.
Compose various employment letters, i.e. thank you and resignation.
Participate in online career search & develop online accounts.
Create a career portfolio.

PORTFOLIO

All students will be required to create a portfolio to showcase their accomplishments. A portfolio is a collection of work related to education, employment, and self-development.

The Portfolio will contain the following:

- a. Title Page
- b. Table of Contents
- c. Resume with Reference List
- d. Achievements-
 - 1. Awards
 - 2. Certifications
 - 3. Transcripts
 - 4. CTSO information
 - 5. PSC certificates (NOCTI)
- e. Skill Set
 - 1. Task List
 - 2. Certificate of Competency
- f. Work Samples
 - 1. Pictures
 - 2. Writing Samples
 - 3. Videos
- g. Other Related Information
 - 1. Computer Applications
 - 2. Community Activities
 - 3. Talents
 - 4. Sports
 - 5. Clubs

READING-MUHLENBERG CAREER & TECHNOLOGY CENTER

WORK BASED LEARNING Cooperative Education & Internships RULES / GUIDELINES

1. All Work Based Learning (WBL) students must have school WBL forms completed before starting the job/internship, and any student 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 will 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 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**, immediately upon arrival, report directly to **Student Services**, where you will sign in with Mrs. Baller. Co-op students will record hours and earnings, and then return to your program area for the remainder of the school day. **Don't forget to bring your check stubs to record your hours and earnings!** Internship students will record hours. **If you miss two Monday 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**
6. 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.
7. 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.
8. 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.
9. If you have any questions concerning the rules and guidelines of Work Based Learning, please contact the WBL coordinator at 610-921-7337.

STUDENT SIGNATURE

PARENT/GUARDIAN SIGNATURE

Articulation Agreements

The Reading Muhlenberg Career and Technology Center has agreements with the following:

Harrisburg Area Community College

Pennsylvania College of Technology

Westmoreland County Community College

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.*

Program Planning Tool

Program Title: HORTICULTURE

Student Name: _____

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.

Program Planning Tool

CTE Requirements	Present Educational Ability/Level	Support Needs
<p>Program Completion – 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.</p>		
<p>Reading & Language Arts Level- 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.</p>		
<p>Math Level - 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.</p>		
<p>Aptitude – Problem solving/diagnostic skills. Mechanical aptitude. Oral comprehension and expression, active listening, analytical thinking, and attention to detail. Artistic ability.</p>		
<p>Safety & Physical – 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.</p>		
<p>Interpersonal/ Social - 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.</p>		
<p>Other Occupational/Program Considerations - 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.</p>		

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.

Subject (Hours)	Secondary School				Postsecondary Institution			
	Grade 9 (Hours)	Grade 10 (Hours)	Grade 11 (Hours)	Grade 12 (Hours)	First Semester	Second Semester	Third Semester	Fourth Semester
Technical		Orientation and Safety	Horticulture Technology	Greenhouse Practices & Production	HRT 101 Introduction to Ornamental Horticulture	HRT 119 Herbaceous Plant Production	HRT 209 Plant Propagation and Production	HRT 224 Landscape Construction
		Horticulture Principles	Greenhouse Production	Floral Design	HRT 102 Horticulture Equipment Operation and Safety	HRT 121 Landscape Plants	HRT 216 Turf Management	HRT 226 Landscape Accessories
		Greenhouse Practices & Production	Arrangements / Centerpieces	Landscaping	HRT 110 Soils and fertilizers	CSC 110 Introduction to Information Technology	HRT 219 Landscape Operations	
		Floral Design	Landscaping	Sustainable Horticulture	HRT 113 Ornamental Plants		HRT 225 Landscape Design	
		Landscaping	Supervised Experience	OSHA-Occupational Health and Safety			HRT 239 Plant Insects and Disease	
		Employability & Leadership Skills	Job Seeking/Keeping Skills	Job Seeking/Keeping Skills				
		Job Seeking/Keeping Skills						
English	College Prep English 9	College Prep English 10	College Prep English 11	College Prep English 12	English 111 English Composition I	ENL 201 Technical and Professional Communication		
Math	Algebra I	Algebra II	Geometry	Trigonometry	Mth 124 Technical Algebra and Trig			
Science	Accelerated Integrated Science	Biology	Chemistry		BIO 111 Basic Botany			
Humanities	Citizenship	World Cultures	American History I	American Government			FIT Fitness and Lifetime Sports	Social Sciences Elective
Other	Physical Education	Physical Education	Physical Education	Physical Education				
	Health	Health	Driver's Ed. Theory	Health				

CAREER & TECHNICAL STUDENT ORGANIZATIONS (CTSO)

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



<http://skillsusa.org>

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)



www.nths.org

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.

Certificate of Competence

*Awarded
May 26, 2015*

This is to verify that

Has met the standards of competence in the

Curriculum by completing the following job title(s)

Herald P. Witmer Jr.

Director

Teacher