

Wallingford Public Schools - HIGH SCHOOL COURSE OUTLINE

Course Title: Plant Science 3	Course Number: 8353
Department: Agricultural Education	Grade(s): 11
Level(s): Academic	Credit(s): 1.5
Course Description Junior course work continues to build a foundation for students interested in plant science. Topics studied include: flower design, holiday shop, and landscape design and maintenance. Students will continue to participate in the Lyman Hall Chapter of the national organization, FFA. Students will continue the development of their portfolio and skills to prepare for future careers in plant science.	
Required Instructional Materials Sufficient Hands-on Materials	Completion/Revision Date Approved by Board of Education October 15, 2007

Mission Statement of the Curriculum Management Team

The mission of the Career and Technical Education Curriculum Management Team is to ensure that students, as a result of their experiences in K-12, will demonstrate transferable skills, knowledge, and attributes for successful life management, employment, career development, post-secondary educational opportunities, and life long learning.

Enduring Understandings for the Course

- Self-reflection of learning experiences, in and out of school, fosters the development of a life long learner. Life long learners are able to apply and refine skills as they prepare for their post-high school endeavors.
- A florist is a multifaceted business that requires creativity, time management, and business knowledge to manage successfully.
- Florist business is a multifaceted business that requires creativity, time management, and business knowledge to manage successfully.
- Successful preparation for the interview process and the ability to present yourself professionally will set you apart from other applicants.
- Landscape design integrates the practical and aesthetic functions of plant material to enhance our environment.
- Gardeners select plants for a particular planting site based on desired characteristics.

LEARNING STRAND

1.0 Transferable Skills

ENDURING UNDERSTANDING(S)

- Self-reflection of learning experiences, in and out of school, fosters the development of a life long learner. Life long learners are able to apply and refine skills as they prepare for their post-high school endeavors.

ESSENTIAL QUESTION(S)

- What is the importance of maintaining a portfolio?
- What are the qualities of an effective oral presentation?
- What safety precautions do I have to follow?
- What can I do differently next time?
- What does a cooperative group require to function successfully?
- How can I assess the situation and implement change?
- What are the characteristics of an organized person? What do I need to do to be more organized?
- How can I manage informational research, organize the information, and present it professionally?
- What is a leader?

LEARNING OBJECTIVES The students will:

- 1.1 Demonstrate public speaking skills using appropriate visuals and tailoring the presentation to specific audiences.
- 1.2 Communicate in writing about a topic using different formats applying relevant vocabulary, supporting evidence and clear logic.
- 1.3 Self-assess transferable skills and reflect on areas of strengths and improvement.
- 1.4 Identify and use the appropriate tools and equipment safely.
- 1.5 Work cooperatively with fellow peers, teachers, and employers to complete a task.
- 1.6 Apply problem solving skills to critically approach a situation and work through the steps to solve the problem.
- 1.7 Develop organizational skills that assist with data collection, data analysis and synthesis.
- 1.8 Apply research skills to collect information, summarize the findings and to cite the sources used.
- 1.9 Recognize leadership skills such as: motivating others, negotiating,

INSTRUCTIONAL SUPPORT MATERIALS

- See other learning strands for integration

SUGGESTED INSTRUCTIONAL STRATEGIES

- See other learning strands for integration

SUGGESTED ASSESSMENT METHODS

- See other learning strands for integration

participating in meetings, gaining confidence, and gaining self-awareness, etc.

- 1.10 Apply computer-based tools such as PowerPoint, Word, Excel, and Access, to organize and present information.
- 1.11 Demonstrate self expression and creativity through different projects.
- 1.12 Develop a positive attitude and become an independent learner in order to prepare for the future.
- 1.13 Organize and maintain a four year portfolio including a compilation of student products and reflections.
- 1.14 Document SAE (Supervised Agricultural Experience) monthly. This includes recording hours, expenses, income, tasks and applied skills.

LEARNING STRAND

2.0 Flower Design

- Approximately 8 weeks

ENDURING UNDERSTANDING(S)

- The floral design industry is multi-faceted where both business expertise and floral design skills are employed.

ESSENTIAL QUESTION(S)

- How are cut flowers marketed?
- What are the components of a salable floral design?
- How are flower arrangements priced?
- What careers and trade organizations are associated with the floral design industry?

LEARNING OBJECTIVES – The students will:

- 2.1 Identify plant material used in the cut flower industry.
- 2.2 Describe handling and care of plant material.
- 2.3 Identify floral supplies and their functions.
- 2.4 Demonstrate principles of flower design using a variety of design styles:
 - Focal point
 - Balance
 - Rhythm
 - Scale
 - Repetition
 - Unity
- 2.5 Demonstrate elements of flower design and critique their application:
 - Line
 - Form
 - Space
 - Texture
- 2.6 Apply color theory in flower design and evaluate effectiveness:
 - Color terminology:
 - Hue
 - Tint
 - Shade (tone)
 - Emotional responses to color:
 - Warm
 - Cool
 - Meanings of colors
 - Color harmony:
 - Monochromatic
 - Analogous
 - Complementary

INSTRUCTIONAL SUPPORT MATERIALS

- Cutflowers, greens, design dishes, oasis, wire, ribbon, pruners, wire cutters, floral tape, glue gun, oasis forms

SUGGESTED INSTRUCTIONAL STRATEGIES

- Field trip to florist wholesale business
- Demonstrate procedure for care and handling of cut flowers and greens
- Model floral design techniques
- Demonstrate bow making
- Design a color wheel
- Excel spreadsheet to calculate retail price
- Create various size, shape, styles of arrangements to demonstrate objectives
- Critique 3 websites found in a floral magazine
- Web Quest on floral design
- Design an arrangement from a picture in a flower magazine

SUGGESTED ASSESSMENT METHODS

- Use a rubric to assess the following:
 - Bow
 - Corsage
 - Flower arrangements
 - Pricing sheet
- Color wheel activity
- Critique arrangements – both individual and peer
- Design an advertisement for a completed flower arrangement
- Portfolio may include:
 - Skill sheet

- 2.7 Create and attach a bow proportional to product and apply color theory.
- 2.8 Price flower designs using wholesale price to calculate the mark-up and retail price.
- 2.9 Explain how technology has impacted the floral industry.

- Work samples of arrangements
- Writing sample – critiques

LEARNING STRAND

3.0 Holiday Shop

- Approximately 4 weeks - December

ENDURING UNDERSTANDING(S)

- A florist is a multifaceted business that requires creativity, time management, and business knowledge to manage successfully.

ESSENTIAL QUESTION(S)

- What are the components of a pleasing arrangement?
- What makes an arrangement salable?
- What personal attributes are necessary for success in the floral business?
- What does a florist consider when managing seasonal sales?
- What is professional? (behavior, merchandise, etc.)

LEARNING OBJECTIVES – The students will:

3.1 Demonstrate flower arranging skills such as:

- Design principles such as sympathy, balance, focal point, rhythm, depth, proportion, and unity
- Green and design a variety of boxwood and seasonal green arrangements
- Design wreaths per customer orders
- Design mixed green arrangements
- Prepare plants for holiday sale
- Establish price and create sales tag for merchandise

3.2 Demonstrate customer service skills such as:

- Prepare assorted orders for delivery or pick up
- Answer customer questions
- Initiate and complete sale and reflect on customer satisfaction
- Assist with daily organization of wreath and plant orders

3.3 Assess inventory of supplies and recommend purchases.

3.4 Assist with supervision of shop activities and aid in the training of new students assisting in shop.

INSTRUCTIONAL SUPPORT MATERIALS

- Assorted wire, tags, wreaths, ribbon, pots and potting material, holiday embellishments, seasonal floral decorations
- Holiday plants and greenery
- Seasonal cut flowers and mixed seasonal greens

SUGGESTED INSTRUCTIONAL STRATEGIES

- Prepare and manage the Holiday Shop for the community
- Model different floral design techniques
- Peer assist arrangement principles for new students
- Peer demonstrate method for attaching wire hangers, wreath sizing, and attaching tags
- Design and construct a wreath, green arrangements, etc. based on customer requests
- Review and discuss student expectations during the Holiday Shop

SUGGESTED ASSESSMENT METHODS

- Teacher observation
- Daily log
- Individual student work samples with written critique
- Holiday Shop written review – personal assessment and critique of the Holiday Shop
- Portfolio may include:
 - Unit skill sheet

	<ul style="list-style-type: none">• Photo of products completed including price and description• Log of daily activities• Holiday Shop written review – personal assessment and critique of the Holiday Shop
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LEARNING STRAND

4.0 School to Career Preparation – Interviewing

- Approximately 4 weeks

ENDURING UNDERSTANDING(S)

- Successful preparation for the interview process and the ability to present yourself professionally will set you apart from other applicants.

ESSENTIAL QUESTION(S)

- Why should I prepare for the interview?
- How can I prepare for an interview?
- What do I need to consider to be successful during the interview?
- What do I need to do after the interview?

LEARNING OBJECTIVES – The students will: **Getting Ready for the Job Interview**

4.1 Write a resume that highlights transferable skills and technical skills related to a specific job and document these skills with artifacts from their portfolio.

4.2 Write a business letter using the correct format which adheres to Standard English conventions.

- Cover letter introducing student to a potential employer
- Thank you letter for interview
- Acceptance or rejection letter for position offered

4.3 Compile a list of three references and contact information.

4.4 Complete a mock job application accurately to emphasize your positive attributes.

4.5 Demonstrate preparation skills related to interviewing. Such as:

- Predict what type of questions will be asked
- Warm-up skills/small talk
- Dress for success/grooming
- How to handle illegal questions
- Company research

4.6 Demonstrate appropriate skills during a mock interview. Such as:

- Non-verbal communication skills
 - Eye contact
 - Positive attitude
 - Hand shake
- Verbal skills
 - Voice, diction, grammar
 - Convincing skills presentation
 - Respond to criticism or

INSTRUCTIONAL SUPPORT MATERIALS

- Videos on writing a resume, cover letters, etc.
- Videos on interviewing
- Sample resumes, cover letters, references
- Assorted job applications

SUGGESTED INSTRUCTIONAL STRATEGIES

- Discuss model resumes and how the different designs highlight different strengths of the applicant
- Discuss the organization and visual presentation of resumes
- Know my skills activity – brainstorm, list and categorize personal skills, technical skills and work experience – then find artifacts in their portfolios to “prove” these skills
- Brainstorm and discuss characteristics of potential references
- Encourage students to contact references prior to using their name on an application
- Role play during practice mock interviews
- Human resource representative from a local company can assist with mock interviews
- Discuss employer expectations for a variety of jobs

SUGGESTED ASSESSMENT METHODS

- Mock interview rubric
- Resume rubric
- Business letter rubric
- Group participation
- Skills checklist
- Portfolio products may include:
 - Resume and cover letter

<p style="text-align: center;">questions</p> <ul style="list-style-type: none"> • Explaining strengths and weaknesses <ul style="list-style-type: none"> ○ Provide concrete examples ○ Positive spin on weaknesses to improve • Ask appropriate and pertinent questions • Comes prepared with needed materials <ul style="list-style-type: none"> ○ Application ○ Resume ○ References ○ Pen, pad of paper and folder ○ Examples from portfolio • Closing statement and thank you <p>4.7 Evaluate the pros and cons of the position presented to you. Evaluate specifics of the employment such as:</p> <ul style="list-style-type: none"> • Salary • Benefits • Hours • Vacation • Working conditions • Opportunities for advancement • Lifestyle needs <p><u>Note:</u> Employment and other related experiences outside of the classroom can be applied towards the SAE requirements.</p>	<ul style="list-style-type: none"> • Mock job application and references • Thank you letter to interviewer • Acceptance or rejection letter for position offered • Photo of student dressed for interview
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LEARNING STRAND

5.0 Landscape Design and Maintenance

- Approximately 12 weeks

ENDURING UNDERSTANDING(S)

- Landscape design integrates the practical and aesthetic functions of plant material to enhance our environment.
- Gardeners select plants for a particular planting site based on desired characteristics.
- Physical geography and climate of a region influences the landscape design.

ESSENTIAL QUESTION(S)

- What do you need to consider when planning a landscape design?
- How does a landscape designer depict a plan?
- How will a planting design change throughout the seasons?
- How are the form and function of plants applied to a landscape plan?
- How do residential and public landscape designs differ?
- How does the landscape design meet the needs of a client?

LEARNING OBJECTIVES – The students will:

- 5.1 Distinguish between careers in the landscaping field including: landscape architecture, landscape design, construction and maintenance.
- Required education / certification
 - Licenses
 - Scope of work
- 5.2 Apply landscape drawing tools and techniques appropriately:
- Landscape symbols
 - Templates – lettering/symbols
 - Color rendering
- 5.3 Relate different landscape features to an historical time period.
- 5.4 Convert measurements to scale drawing.
- 5.5 Evaluate principles of landscape design and apply to design situations:
- Focal point
 - Balance – symmetrical / asymmetrical
 - Sequence
 - Rhythm
 - Depth
 - Unity
- 5.6 Identify public, private, and service areas in a residential property.
- 5.7 Apply design principles and select suitable plantings for residential and public

INSTRUCTIONAL SUPPORT MATERIALS

- Drawing pencils / lead; drawing boards; coloring media; scale; T-square; templates
- Public and residential plots
- Local nurseries and garden centers
- Assorted catalogs and magazines

SUGGESTED INSTRUCTIONAL STRATEGIES

- Design sketches incorporating landscape principles and landscape symbols – parking lot spaces, residential buildings, etc.
- Apply previous unit (Ornamental Plant Material) by selecting suitable plant material for specific plots
- Interview home and business owners and compare and contrast specific needs and property specs
- Use pictures / fieldtrips to introduce design principles
- Investigate different items in respect to price, quality, size availability
- Use Excel to calculate price proposal
- Model different drawing techniques and how to draw to scale
- Sketch a bubble diagram of a residential area
- Create historical timeline outlining major time periods and landscape trends
- Explore websites to investigate plant

<p>buildings.</p> <p>5.8 Analyze a site and interview property owner to complete site analysis.</p> <p>5.9 Calculate a cost estimate for labor and materials.</p>	<p>characteristics</p> <ul style="list-style-type: none">• Use magazines to identify different principles of design• Write a summary of design principles used in a particular drawing• Interpret a landscape design plan, purchase materials and install planting <p><u>SUGGESTED ASSESSMENT METHODS</u></p> <ul style="list-style-type: none">• Peer critiques using checklist• Oral presentations and rationale behind the design to property owner• Design sketches• Portfolio may include:<ul style="list-style-type: none">• Skill sheet• Written rationale and critique• Planting plans and designs
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