# Stockbridge School of Agriculture University of Massachusetts Amherst

**ARBORICULTURE INTERNSHIP NRC 198Y**

# 4 Credits

**Spring 2021**

**Instructor:** Professor Kristina Bezanson

Cell 757-348-3075

[kbezanson@umass.edu](mailto:kbezanson@umass.edu)

**Office Hours:** Tuesdays

10:00 a.m. - 11:00 a.m.

Zoom Link: <https://umass-amherst.zoom.us/j/95847394065>

**Note:** NRC 198Y forms are available on the Stockbridge School website and the Blackboard NRC 188Y course

# Course Description:

Arboriculture Internship is required of all Arboriculture & Community Forest Management students. Five (5) months, April 1 to September 1.

Internship must be with an arboriculture company or the urban forestry sector with a qualified arborist as supervisor. A qualified arborist holds an ISA arborist certification or a state certification like Massachusetts Certified Arborist. *Your advisor must approve this internship*.

# Course & Grading Requirements:

* Daily Journal 30 points
* Herbarium (Tree Identification Collection) 50 points
* PowerPoint Presentation 20 points

# Due Date: Tuesday September 7, 2021 by 2:30 p.m.

*25% grade reduction for each school day report is submitted late*

Daily Journal, Herbarium, and PowerPoint Presentation due by deadline

# 2021 Internship Calendar

**January 2 Blackboard, Read Handbook and set up a zoom appointment to meet with professor Bezanson.**

# Arboriculture Internship Agreement

* + submit to Professor Bezanson before first day of work
  + *You cannot start working until the Agreement Form and insurance information have been submitted*
  + *You will be withdrawn from the course unless the form is turned in on time*

# April 1 Internship Start-up Date

**April 5 Fall Preregistration Begins**

* + Information will be sent to your student email
  + If you do not receive your preregistration information, contact Elizabeth at (413)545-3305
  + *If you do not preregister for your fall courses at this time, you will not be guaranteed to get into all of your required classes*

# April 30 30-Day Evaluation of Employer Due

*5 points deducted if not sent in by May 15*

# April 30 30-Day Evaluation of Student Due

*5 points deducted if not sent in by May 15*

# September 7 Employer’s Final Evaluation of Student Due

*10 points deducted if not sent in by September 15*

# September 1 Classes Begin for Fall 2021 Semester

**September 7 Daily Journal, Herbarium, and PowerPoint Presentation Due**

This internship can be described as a cooperative work experience, which is required of all first-year students. You are responsible for finding your own job; your advisor must approve this job. While your advisor will assist you in locating a suitable position, it is your responsibility to prepare a resume and successfully interview for the position. Positions should be secured that will enable the student to gain as much practical experience as possible in arboriculture, park or community forestry. You must work for a company that has a qualified arborist who will supervise your work. Although the wage rate will vary depending on your experience, you should earn a reasonable salary.

# Accommodation Statement

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements.

# Names and Pronouns

Everyone has the right to be addressed by the name and pronouns that they use for themselves. Students can indicate their preferred/chosen first name and pronouns on SPIRE, which appear on class rosters. Please let me know what name and pronouns I should use for you if they are not on the roster. A student’s chosen name and pronouns are always to be respected in the classroom and online in Moodle.

# Academic Honesty Statement

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring

such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department head or chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent ([http://www.umass.edu/dean\_students/codeofconduct/acadhonesty/).](http://www.umass.edu/dean_students/codeofconduct/acadhonesty/))

# Internship Requirements

All students are required to complete the five-month training period without unnecessary absences. In addition to the time requirement, the following graded report is required to successfully complete your co-op internship.

# Daily Journal (30 Points)

Keep a daily journal of tasks, places and trees you worked with each day. This is a journal for you to keep and on which to reflect. I will check your daily entries; I will not be reading the details.

# Tree and Shrub Herbarium or Photo Album (50 points)

During your internship you will collect and mount 50 tree and shrub specimens. The purpose of this assignment is to reinforce your training in Plants in the Landscape (SUSTCOMM 335) and to prepare you for your arboricultural certification exam. The herbarium or photo album will be incorporated into an 8.5 x 11 report, bound in an attractive folder. You will be graded on content, completeness and presentation. You must have at a minimum:

* 1. Title page & table of contents
  2. Fifty (50) properly mounted trees and shrubs; minimum twenty-five (25) trees
  3. Each plant will have a label with the following information:
     1. Common name
     2. Latin name
     3. Where collected
     4. Date collected
     5. Page number that corresponds to table of contents
     6. Place label on bottom right hand corner of page
     7. When collecting plants, collect as many plant parts in as many stages of development as possible - buds, leaves, flowers etc. If a plant has a unique characteristic that distinguishes it from other species be sure to include the feature with your collected specimen.

*Remember: you will want to use this when studying for your certification exam*

* + 1. Feel free to add a “fun fact” about your specimen, something unique about the species or this collection. Or you could include cultural information or popular pest and disease problems to which the plant is susceptible.

# PowerPoint Presentation (20 Points)

Create a brief PowerPoint presentation about one or two of your favorite jobs during your internship. Use 4-10 slides; do not use less than 4 or more than 10. You will share your presentation with your classmates in Commercial Arboriculture in a ten to fifteen minute presentation.

# Pressed Specimen Herbarium

* Start by selecting the best specimens
* Pick a sunny day and collect only dry leaves
  + Avoid leaves with any damage because these imperfections will be accentuated when the leaves are dry.
  + Try to find at least two or three leaves from each species so that you will have a goodrepresentation.
  + Within a half hour of collecting, place each leaf between two layers of paper towel or blotting paper (you can find this in any art store).

If you wait much longer, the leaves begin to dry out and lose color



The trick to keeping the colors sharp is to remove the moisture as quickly as possible

* Gently put the leaf (with its paper) between the pages of a large book
  + A big phone book works well, but I prefer a large “coffee table” book

The pages are thicker and therefore more likely to withstand moisture



When adding weight for pressing, a big hard-back book is less likely to shift and damage the leaf

* Keep at least ten pages between leaves, but do not put in too many
  + Use a second book if you have a lot of leaves
* Stack at least five more books (at least five pounds of pressure) on top
  + Let them sit for ten days or more
  + Keep the books in a dry room (no humidifiers)

For best results: change the blotting paper after the first few days of pressing

* If you have just a few leaves and want quicker results: try ironing them dry
  + Set your iron on medium (no steam)
  + Place the leaves between single layers of absorbent paper or paper towels
  + Press for at least ten minutes
  + Turn the leaves over
  + Change the paper
  + Press the second side for about five minutes
  + To prevent scorching: keep the iron moving constantly

# OR

**Photo Album Herbarium:**

The same rules for specimen selection apply to the photo herbarium

* Pictures need to be clear
* Pictures need to have sufficient light so that identifying characteristics can be easily seen
* Pictures need to have a concept of scale (a small ruler or coin)
* You or a co-worker must be present in at least 20 of the photo pages
* The photo pages need to have a consistent format, with identically sized photos and locations on each photo page
* I strongly recommend making a template to use for each specimen collected

The next page demonstrates an example of using photos for this project. You must have at least three (3) photos for each plant. **Only your photographs are allowed; do not use anything that you did not produce.**

**Sugar maple** *Acer saccharum*

Page # Date collected Location collected

**Leaf:** Opposite, simple and palmately veined, 3 to 6 inches long, 5 delicately rounded lobes, entire margin; green above, paler below.

**Flower:** Light yellow-green, small, clustered, hanging from a long, slender (1 to 3 inch) stem, appearing with or slightly before the leaves in early spring.

**Fruit:** Two-winged horseshoe-shaped samaras about 1 inch long, appearing in clusters, brown when mature in the fall.

**Twig:** Brown, slender and shiny with lighter lenticels; terminal buds brown, very sharp pointed, with tight scales.

**Bark:** Variable, but generally brown, on older trees it becomes darker, develops furrows, with long, thick irregular curling outward, firm ridges.

**Form:** Medium to tall tree (to 100 feet) with very dense elliptical crown.

**Fun Fact:** Xylem sap is harvested in the spring and is made into maple syrup. Tree has to be older than 40 years to harvest sap.





# This report is to be done on your time not during work hours ARBORICULTURE INTERNSHIP

**NRC 198Y Grading Sheet**

Name

Company

1. **Daily Journal** 30 points

# Herbarium (50 points total)

50 Specimens Properly labeled

Condition of specimens 25 points Presentation

Completeness

Overall quality 25 points

1. **PowerPoint Presentation** 20 points

# Total

**Tips for a successful internship**

* Communicate with your employer and make sure you are upfront with what skills you know how to do, and which ones are new for you. Honesty is the best policy.
* Listen to your supervisors and ask questions if you are not sure of what they are asking you to do.
* Make sure you write in all the deadlines in your calendar / phone notifications, so you do not miss any deadlines for your paperwork.
* If you leave your internship for any reason, or change jobs contact professor Bezanson right away.
* Start your herbarium as earliest as you can, it takes a long time to compile all the plants and format the book. Do not wait until the end of the summer to put it together.
* Your journal is for your reflection, you can design the format of the information you log in, get into the habit of writing a little something every day.
* Have fun, be safe, you will work hard, learn a lot and make great connections.

# ARBORICULTURE INTERNSHIP NRC 198Y Check List

Forms may be found in Blackboard

# REQUIRED paperwork due before first day of work Arboriculture Internship Agreement

Copy of Employer’s **Workman’s Comp Insurance**

**REQUIRED** paperwork due on or before **April 30, 2021** **30-Day Evaluation of Employer**

# 30-Day Evaluation of Student

**REQUIRED** paperwork due on or before **September 7, 2021**

Employer’s **Final Evaluation of Student**

**Daily Journal** due first day of class in NRC 305

**Herbarium** due first day of class in NRC 305

**PowerPoint Presentation** due first day of class in NRC 305

Email or mail to me the information listed above by the dates listed or you will ***not*** earn credit for your internship.

Professor Kristina Bezanson 119 Holdsworth Hall

UMass Amherst 160 Holdsworth Way Amherst, MA 01003

Cell: 757-348-3075

[kbezanson@umass.edu](mailto:kbezanson@umass.edu)

# STOCKBRIDGE SCHOOL OF AGRICULTURE UMASS AMHERST ARBORICULTURE INTERNSHIP HANDBOOK

The internship program at the Stockbridge School of Agriculture is an integral part of our students’ academic career. The program provides each student with industry-related work experience, which will supplement his/her classroom studies. To the employer, we thank you for being part of our student’s academic career by integrating the student into the many facets of your business.

Both the student and employer should review the following information:

# INSTRUCTIONS:

* + Student & employer should meet weekly; establish a clear understanding of the work assignments, expectations, and concerns
  + Student & employer must sign the **Arboriculture Internship Agreement**; student will submit the form to the program coordinator **before starting the first day of work**; the employer’s Workman’s Comp insurance form must be attached
  + Complete & return the **30-Day Evaluation of Employer** and **30-Day Evaluation of Student** to the program coordinator by **April 30th**
  + Complete & return the employer’s **Final Evaluation of Student** to the program coordinator by

# September 8th

The student is required to complete a report to receive a grade for his/her internship. The Arboriculture Report requirements and student/employer pages are posted at: [https://stockbridge.cns.umass.edu/Internship-](https://stockbridge.cns.umass.edu/Internship-Information) [Information](https://stockbridge.cns.umass.edu/Internship-Information)

The student is responsible for completing the work on his/her own time, not company time. If you have any questions, please do not hesitate to contact:

Professor Kristina Bezanson 119 Holdsworth Hall

UMass Amherst 160 Holdsworth Way Amherst, MA 01003

cell: 757-348-3075

[kbezanson@umass.edu](mailto:kbezanson@umass.edu)

# INTERNSHIP REQUIREMENTS

* Pre-register for internship during registration for spring semester. Students should access their SPIRE account for their enrollment appointment date and time.
* Work full time (40 hours/week) for the duration of the internship. One credit equals four (4) weeks/160 hours. Students can expect a reduction in credits when the required weeks are not completed as outlined by major.

students are required to complete five (5) months/22 weeks for four (4) credits.

* Submit all required forms by the designated deadlines otherwise there will be reduction to your final grade. Submit the **Arboriculture Internship Agreement** before starting the first day of work and the **30-Day Evaluation of Employer** and **30-Day Evaluation of Student** forms by **April 30th**.
* It is the student’s responsibility to make sure the employer submits the **Final Evaluation of Student** form by

# September 7th.

* Complete and submit the internship report as outlined in the Arboriculture Internship Instructions by **September 7th at 2:30 p.m.** to Professor Kristina Bezanson. There will be a full grade reduction to the final grade for each day the report is received after the deadline.
* Earn a grade of “C” (2.0) or better, and complete the required credits specified by your major for

graduation.

* Meet the work quality standards of the employer and the minimum standards as outlined inthe

# Final Evaluation of Student form.

* Students who change positions, for whatever reason, must notify their program coordinator inwriting.
* Students should coordinate any vacation plans with their employer.

# ARBORICULTURE INTERNSHIP AGREEMENT

Student name Phone ( ) Student summer address

Street City State Zip Code

Company name

Company address Street City State Zip Code

Employer name Phone ( ) Employer **Workman’s Compensation #**

***Please attach verification of Workman’s Comp. Insurance***

Period of employment from: to: Daily work hours: from: a.m. to p.m.

Days per week that student will work: Remuneration that the employer will pay student $ per hour

What is the overtime agreement for work beyond 40 hours per week? $ Educational objectives and activities in which the student will participate:

Two weeks’ notice must be given to all parties before this agreement is terminated. We, the undersigned, agree to conform to this agreement.

Employer signature Date

Student signature Date

# Return form before starting the first day of work to:

Professor Kristina Bezanson 119 Holdsworth Hall

UMass, Amherst, MA 01003

[kbezanson@umass.edu](mailto:kbezanson@umass.edu)

# ARBORICULTURE

**30-DAY EVALUATION OF EMPLOYER**

|  |  |  |  |
| --- | --- | --- | --- |
| Student name | Phone | ( ) |  |
| Student summer address |  |  |  |
| Street City | | State | Zip Code |
| Company name | | |  |
| Company address |  |  |  |
| Street City | | State | Zip Code |
| Employer name | Title | |  |
| 1. Did you discuss the internship program and your educational objectives with: | | | |
| a. your supervisor? | YES | NO (explain on reverse side) | |
| b. other? | YES | NO Whom? |  |
| 2. Are you satisfied with the conditions of your employment: | | | |
| YES | | NO (explain on reverse side) | |
| 3. Are relations with your employer and co-workers satisfactory: | | | |
| YES | | NO (explain on reverse side | |
| 4. Date you began yourinternship: |  | |  |
| 5. If provided, are room and board arrangements satisfactory: | | | |
| YES | | NO (explain on reverse side) | |
| 6. On the reverse side, list the type of work you have performed since your internship began. | | | |
| Student signature |  | Date |  |

# Return form by April 30th to:

Professor Kristina Bezanson 119 Holdsworth Hall

UMass, Amherst, MA 01003

Cell: 757-348-3075

[kbezanson@umass.edu](mailto:kbezanson@umass.edu)

# ARBORICULTURE

**30-DAY EVALUATION OF STUDENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student name | Phone | ( ) |  |  |
| Student summer address | | | | |
| Street City | | | State | Zip Code |
| Company name | | | | |
| Company address | | | | |
| Street City | | | State | Zip Code |
| Employer name | Title |  | | |
| 1. Is the student performing to your satisfaction: |  |  | | |
| YES | NO | | | |
| 2. Does the student follow instructions: |  |  | | |
| YES | NO | | | |
| 3. Is the student arriving to work at the specified hour: |  |  | | |
| YES | NO | | | |
| REMARKS |  |  | | |
|  |  |  | | |
|  |  |  | | |
|  |  |  | | |
|  |  |  | | |
| Employer/Supervisor signature |  | Date | | |

# Return form by April 30th to:

Professor Kristina Bezanson 119 Holdsworth Hall

UMass, Amherst, MA 01003

Office: 757-348-3075

[kbezanson@umass.edu](mailto:kbezanson@umass.edu)

# ARBORICULTURE FINAL EVALUATION OF STUDENT

We thank you for providing this Stockbridge School of Agriculture student with a positive learning experience, which will complement his/her classroom education. Please complete this confidential form that will be used along with the student’s report to assess the student’s internship grade.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student name |  | Phone | ( ) |  |
| Student summer address |  |  |  |  |
| Street City State Zip Code | | | | |
| Company name | | | |  |
| Company address |  |  |  |  |
| Street City State Zip Code | | | | |
| Employer name |  | Phone | ( ) |  |
| Approximate number of absences | Number of employer/student conferences | | | |
| First day of work | Last day of work | | |  |
| • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •  • • • • • • • • • • | | | | |
| 1. Is the student honest? |  |  | YES | NO |
| 2. Does the student communicate well? | |  | YES | NO |
| 3. Is the student arriving to work on time? | |  | YES | NO |
| 4. Is the student completing assigned projects in a timelyfashion? | | | YES | NO |
| 5. Does the student follow instructions? | |  | YES | NO |
| 6. Does the student get along well with other employees? | |  | YES | NO |
| 7. Does the student show enthusiasm? | |  | YES | NO |
| 8. Does the student accept constructive criticism? | |  | YES | NO |
| 9. Do you think the student displays leadership potential? | |  | YES | NO |
| 10. Quality and thoroughness of student’s work: | | | | |
| Excellent | Good | Average | Fair | Poor |
| 11. How would you rate the student’s technical competence? | | | | |
| Excellent | Good | Average | Fair | Poor |
| 12. Other comments you would like to share about the student? | | |  |  |

# THIS EVALUATION IS CONFIDENTIAL

**At the end of the student’s internship, return form (email) by September 7th to:**

Professor Kristina Bezanson, 119 Holdsworth Hall, UMass, Amherst, MA 01003, [kbezanson@umass.edu](mailto:kbezanson@umass.edu)