UC Botany Intern Responsibilities and Tasks

All University Center Botany Interns are responsible for a variety of plant-related tasks. These tasks may be carried out day to day or as needed, depending on the state of the plants and what needs to be organized within the operation.

Duties

Watering

Every plant in the UC needs regular watering based on their individual needs. Some plants need water every 10-14 days; others need water only once a month. It is important to understand each plant's individual watering requirements to avoid over or under-watering. Information on when each plant needs watering can be found in the UC Plant Guide. There is a spreadsheet in the shared UC Botany folder in Google Drive where all basic watering schedules can be found. It is called the UC Plant Watering Schedule. This spreadsheet should be followed and updated daily, and edits should be made where necessary. Throughout the seasons, plants' watering schedules may change. Plants often need less water in the winter and more in the warmer months. Any changes to watering schedules should be logged in the UC Plant Watering Schedule.

Upon watering a plant, it is important to keep in mind whether its pot has drainage or not. If the pot has drainage, water until a small amount drains out into the tray. This can be tricky if too much water is used; it may end up flooding up and out of the tray. To avoid this, pour water in increments. It's okay to give a little at a time within one watering, pausing in between to see if any drains. Once you notice drainage, move on.

If a pot has no drainage, do NOT overwater. You do NOT want to see any standing water above soil level after allowing it to soak in. Again, one might consider pouring in increments. As a general rule of thumb, pour the equivalent of ¼ to ⅕ the volume of the pot. If unsure, pour less. The roots of the plant do not want to be sitting in stagnant water. Generally, plants like to dry out a bit between waterings. For plants with thicker leaves and stems, let them dry out about halfway (or more) between watering. For plants with thinner or more flexible leaves and stems, water when roughly ¼ of the soil is dry. You can find out how much is dry by sticking a finger or wooden chopstick into the soil. If it comes out completely dry, it's safe to water.

Fertilizing

The UC plants also need to be fertilized on a regular basis. Osmocote Smart Release (pink container) is what is used in the UC, as it slowly releases nutrients into the soil over time. This fertilizer works on any and all of the plants in the building. There is a fertilizing schedule spreadhseet in the UC Botany Internship folder in Google Drive. This spreadsheet is meant to be a place to log every time the plants are fertilized, to prevent over or under-fertilizing. Osmocote works with temperature, and it influences how many nutrients are taken up by the plant. Most of the plants in the UC will only need occasional fertilizing, and also when repotting. This fertilizer is typically administered every 6 months, but can depend on the plant. Osmocote states that their feedings last up to 6 months. For example, if fertilizer is used upon repotting, then one would not need to apply it again for another 6 months.

To apply Osmocote Smart Release when repotting, mix 1 capful into every 2 gallons of soil. That means half a capful for every gallon, a quarter-capful for every half-gallon, and so on. It can be mixed into the soil being prepared for repotting. To apply it when NOT repotting, stir up the top 2 to 3 inches of soil and sprinkle the appropriate amount of Osmocote into it. Mix it up thoroughly so that the fertilizer is not sitting only on the surface of the soil.

Propagating

There are many ways to propagate houseplants. Propagating is the process of creating new plants from ones that are already grown. The most common methods used for the UC plants are water propagation and moss box propagation.

For water propagation, use clean scissors to cut below a node, although 2 to 3 nodes would be the best option. Nodes are where new growth and arial roots appear. After cutting below the nodes, remove any lower leaves coming out of them. Then place the cutting in a container of clean water. Make sure the bottom 2 to 3 nodes are submerged, as this will be where roots grow. Change the water every 3 to 5 days to help avoid rot. If the water is discolored, empty and refill it. Within a few weeks, roots should appear. Once the roots are about 2 inches or longer, the cutting can be transferred to soil. The soil should then be kept more moist than normal for the next 1 to 2 weeks to help the plant transition to being in soil rather than water.

For moss box propagation, a cutting may be taken in between nodes then placed node/root-down into damp (not soaking wet) sphagnum moss inside of a clear, (mostly) air-tight box. Once all of the cuttings are in the box, give them a final misting and seal the lid. Place the box either in sunlight or under a grow light. Open the lid for a few minutes every week or so to allow for airflow. Condensation should build up on the inside of the box. Periodically, the moss may dry out; when this happens, mist it down with water from a spray bottle. The moss should be damp, not soaking wet. As weeks pass, there should be roots forming, and eventually leaves/shoots.

Pruning

Pruning is one of the easier parts of plant care. When you notice any dried up or dead leaves, take a clean pair of garden scissors and cut it off at the stem. If there is a node below it, do not cut beyond it; the cut should be made above the node. New leaves grow out of nodes, so you want to leave it on the plant.

Sometimes plants start looking a bit unruly and may require some extra attention with pruning. There are also other ways to shape a plant, like by using stakes and twine to hold up limbs and stems. If a plant looks really messy and needs a trim, keep in mind that a plant can't lose too much of its foliage without damage to its health. But if there are a lot of dead leaves, cut them off so the plant can focus on putting energy into new growth. If a plant is flowering, you might have the option to cut the flower off. Plants put a lot of energy into flowers and less energy into growing new foliage when in bloom. This is a situation in which cutting off a flower or two may be essential to growth. But ultimately it's up to the person pruning it; if the flower looks good, they might consider leaving it alone.

Spreadsheets and Documents

In the UC Botany Team, we keep a number of documents and spreadsheets handy in the UC Botany Google folder. Things like the watering schedule, reference guides, and meeting agendas can all be found there. The most important documents will be under "References and Guides" and "Care Schedules." There you will find instructions on plant care, the watering spreadsheet, and more, including *this* document too. All important information can be found in the folder for reference at any time.

It is expected that UC Botany Interns will make regular updates to documents and spreadsheets such as the watering schedule sheet. The watering schedule is updated the most frequently. For help understanding which plant is which around the building, see the "UC Plant Guide" document in the folder. It lists every plant in the building, along with descriptions and care instructions. That document paired with the watering schedule makes up most of what a Botany Intern needs to know from the beginning, aside from training documents.

Communicating

Every Botany Intern needs to have good communication skills and be able to effectively communicate with the rest of the team and the department. There will be regular meetings with the team to assess current projects and goals, as well as to address any concerns that may arise about the plants and their care. Email and WebEx will be utilized to communicate, as well as by text message if applicable. Responding in a timely manner to messages and emails is important, but we understand that sometimes life gets in the way, and that's okay. As long as everyone does their best to respond to others on the team when they can; that's what matters.

If eligible to earn credits for the internship, you may be expected to send updates to a faculty member, depending on department. This is established on an individual basis.

Another part of communication in this position involves responding to emails or questions from students and guests. Upon receiving an email from someone regarding a question or concern about the UC plants, you should respond in a timely manner. If you are off

the clock or busy, the message could be forwarded to another Botany Intern to answer. If you don't know how to answer someone's question, be honest, and find someone who would know how to answer it, like the Botany Team Leader.

Planning and Organizing

Another crucial part of this internship is planning and organizational skills. There are many aspects of the job that require careful planning and organizing, like when arranging plants around the building to best suit their needs. Sometimes things happen that get in the way of original plans, and you need to be able to come up with new strategies to accomplish tasks. This is very important, along with organizing plans ahead of time to ensure all needs are met and materials are accounted for.

If necessary, a Botany Intern might start a document or spreadsheet to track a new project or task. Any documents created should be created within the shared Google folder. This also ties into communication skills; everyone on the team should be aware of new projects and tasks found in the folder.

In Conclusion…

These are the main duties and responsibilities of the UC Botany Interns. Over time, other responsibilities may arise, and will be addressed. It is our job to make sure the plants in the UC are taken care of properly and have what they need to thrive. Thank you for being a part of UC Botany.