
IOWA STATE UNIVERSITY

Helping you become your best.

College of Agriculture & Life Sciences
Department of Horticulture
Landscape Design, Installation and Management Option

Welcome!

I am Sarah Hogan, a graduating senior in the Department of Horticulture and am completing my coursework in the Landscape Design, Installation and Management option here at Iowa State University. When I first decided to come to ISU I had so many questions about what to expect as a college student. Maybe you have some of the same questions I did! Now as a senior, I look back and think how helpful it would have been to have answers to some of those questions. As a prospective student in our department, I would like to walk you through the undergraduate degree program in the Department of Horticulture and share with you some of my insights as a student. During this brief tour I will give you a little history about horticulture at ISU, what the department is like now, what types of courses you need to take, who will teach the courses and what types of extracurricular activities you can get involved with. My goal is to give a you glimpse at what your undergraduate experience might be like as a future horticulture student here at Iowa State University.



Horticulture at Iowa State University

The Department of Horticulture at Iowa State University has a very rich history. Horticulture classes started at ISU in 1869 when the University only offered 20 subjects total. Horticulture became the first official department in the College of Agriculture in 1877. Initially landscape architecture was part of the department but in 1930 it became a separate department and moved to the College of Design.

The Department of Horticulture

Horticulture Hall was constructed in 1978 and is located right on central campus. As you walk in the main entrance you will find the main office with our receptionists and the head of our department, Dr. Jeff Iles.



You will also find the office of Barb Osborn, our main undergraduate academic advisor and Program Coordinator for the Horticulture Career Center. She works with all of the incoming freshmen and transfer students in the department. She will help you immensely your first year!

Also near the main entrance is the Horticulture Reading Room. This space is designated just for horticulture students where we can hang out and catch up on studying. There are always plenty of



friendly faces in there. The first floor of Horticulture Hall has most of the professor's offices as well as the landscape design computer lab and classrooms. Almost all of your horticulture classes will be held in this building. The basement floor includes the landscape design studio, another teaching lab, and the entrance into all of our greenhouses. The greenhouses contain a bunch of faculty research projects, class projects, the Horticulture Club's plants for different plant sales, and a conservatory.

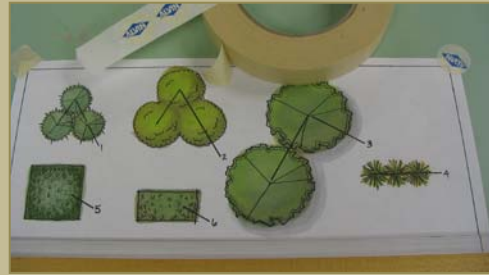


As a student in the Landscape Design, Installation and Management option, you will spend a lot of time in the horticulture computer lab and the design studio. This is where all of the fun projects take place!



Here are some students hard at work on their final designs for the semester.

In the design studio students are assigned their own drafting table and T-square. There is a code needed to enter the studio so only students enrolled in the class have access to the studio. This way we can feel safe about leaving our design supplies and projects in the studio at all times. We can also come and go freely to work on projects throughout the day. It makes it very convenient for us and allows us to



work during the time of day when we feel most creative and productive. The studio is a great place to hang out. It has a very laid back atmosphere with music playing and posters of plants to help the creativity flow.

In the horticulture computer lab there are 24 computers with software used specifically for landscape design and drafting. We can use computers to create two dimensional black and white drawings as well as complete 3D walkthroughs of our designs. After 5:00 pm only landscape design students can access the lab with a special code. This gives us uninterrupted time in the lab where we can collaborate with each other on our design projects.



Across the hall we have a large format printer that allows us to print our projects up to 42" wide and a scanner where we can scan our designs created by hand. Between the design studio and computer lab we have all of the tools we need to create outstanding designs.

Degree Requirements for an Undergraduate Horticulture Degree

The Department of Horticulture offers an undergraduate degree in horticulture, with the opportunity to specialize in a particular area. These specialty areas are called options. There are nine options for you to choose from and they include:

- **Environmental Horticulture**
- **Greenhouse Production and Management**
- **Fruit and Vegetable Production and Management**
- **Horticultural Communication and Public Education**
- **Landscape Design, Installation and Management**
- **Nursery Crops Production and Landscape Management**
- **Public Garden Management and Administration**
- **Horticultural Science**
- **Turfgrass Management**
- **General Horticulture**

To earn an undergraduate degree at Iowa State University you must complete 128.5 credits. Some of these credits are required by the university while other credits are required by the Department of Horticulture and they vary depending on which option you choose. The basic requirements for all horticulture students are the same and include:

- 12.5 credits of interpersonal and public communication
- 6 to 9 credits in mathematical sciences
- 13 credits of physical sciences
- 18 credits of biological sciences
- 15 credits in humanities, ethics, and social sciences
- 3 credits of soil science
- 30 credits of horticultural sciences



For the **Landscape Design, Installation and Management** option you will then need 18 additional credits to fulfill the option requirements. The remaining 13 credits needed to earn your degree come from elective courses. Below are the descriptions and credits for the required horticulture courses for the Landscape Design, Installation and Management option.

Hort 240. Trees, Shrubs, and Woody Vines for Landscaping, 3 credits. Students will learn to identify trees, shrubs, and woody vines. Factors influencing the horticultural use of woody plants also will be taught.

“This is a hard class but is essential to being a successful landscape designer.”



Hort 341. Woody Plant Cultivars, 2 credits. Students will learn how to identify and care for the most horticulturally important shade trees suitable for the Midwest.

“This is the last plant identification class and will help you learn about the most common trees used in our area.”



Hort 280. Landscape Graphics, 3 credits. Introduction to computer and hand rendering techniques of landscape graphics.

“This is the first design course and helps you get ready for the advanced design courses. We learned about all kinds of techniques and I really saw improvement in my skills from the beginning to the end of the semester.”



Hort 342. Landscape Installation and Establishment, 3 credits. Principles and practices involved with establishment and maintenance of woody ornamental plants in the landscape.

“In this class we learned how to install landscapes and then how to take care of them so they look great and make the homeowners happy. The lab was really helpful since we worked on real projects and got to see the landscape installed from start to finish.”



Hort 330. Herbaceous Ornamental Plants, 3 credits. Identification, botanical characteristics, origins, propagation, uses and general culture of herbaceous annual and perennial plants for Midwestern gardens and landscapes.

“Another hard plant identification course but it is also really important so you know what types of plants you can put into a design.”

Hort 351. Turfgrass Establishment and Management, 3 credits. Principles and practices of turfgrass propagation, establishment and management.

“Learning about how to plant and grow turf is important since almost all landscapes have a lawn area. It was fun to be in class with the turf students.”

Hort 380. Principles of Garden Composition, 2 credits. Functional and aesthetic aspects of landscape planning as a basis for design decisions; emphasis on plant selection.

“I took this lecture class at the same time as Hort 381. It was great to learn about things in class and then draw them in the studio. We also learned a lot about landscape design history.”



Hort 381. Beginning Garden Composition Studio, 2 credits. Development of landscape graphic techniques. Studio-based projects implementing principles of landscape design.

“This is the second design course and gives us the chance to use what we learned in the graphics course to actually start drawing landscapes. We spent a lot of time in the design studio working on our projects and learning from each other.”



Hort 444. Landscape Construction, 3 credits. Principles and practices of residential landscape construction. Encompasses process from initial client contact to installation of plant material and hardscapes and project management.

“In this course we learned how the construction process works, how to manage it and what types of things we need to know in order to have a successful project. Really good real-world experience.”

Hort 446. Landscape Contracting and Estimating, 2 credits Overview and implementation of landscape estimating and contracting. Includes estimating procedures (material, labor, equipment) and landscape business issues (contracts, insurance, personnel).

“A lot of math! This class helped me understand how much to charge my future clients for the design and installation work I do. Really important if I want to stay in business.”



Hort 480. Contemporary Issues in the Green Industry, 3 credits. Analysis and evaluation of contemporary issues facing the green industry including environmental regulations, labor, market share, landscape contracting business management and professionalism.

“This discussion based class really got me thinking about my future and what type of issues I might have to deal with. It was pretty intense.”



Hort 481. Advanced Garden Composition, 3 credits. Development of residential landscapes using design principles and the design process. Projects encompass site analysis, concept development, preliminary design, final design, and graphic presentation techniques.

“My final design class! We spent a lot of time in the studios working on a number of big design projects. Some of our final projects turned out really neat.”

Department of Horticulture Faculty

Once you have declared **Landscape Design, Installation and Management** as your option, there will be a few professors you will work with on a regular basis. The entire faculty in the department is very helpful and here to make college the best experience possible. You should always feel welcome to approach them with questions you have or when you need advice in their area of expertise.

I'd first like to introduce you to the two landscape design and construction professors who you will get to know very well during your college career. You will find that they are always willing to take time out of their day to help you in any way possible. Their main goal is to help you succeed and reach your goals while a horticulture student at Iowa State University.



Dr. Ann Marie VanDerZanden has been with us at Iowa State since 2003. She specializes in the landscape design area and teaches the following

courses: Principles of Garden Composition (Hort 380), Beginning Garden Composition Studio (Hort 381), Landscape Contracting and Estimating (Hort 446) and Advanced Garden Composition (Hort 481).



Dr. Mike Reinert is the newest addition to our Horticulture faculty and has been at ISU since 2008. He teaches Landscape Graphics (Hort

280), Landscape Installation and Establishment (Hort342), Landscape Construction (Hort 444), and Contemporary Issues in the Green Industry (Hort 480).

The following professors will all be instructing classes that you are required to take in the design and installation option. They all have a lot of knowledge regarding landscape plants and you should take advantage of these resources.



Dr. William Graves is a real expert in nursery and landscaping plants and teaches the class Woody Landscape Plants (Hort 240).



Dr. Cynthia Haynes' focus is on the human issues in horticulture and public gardens. She teaches the Herbaceous Ornamentals (Hort 330) class where you will become very familiar with the perennials, annuals, vines, and ornamental grasses used in our climate.



Dr. Jeffery Iles is the chair of our department and focuses his research on issues in nursery production and landscape installation and maintenance. He instructs the Woody Plant Cultivars (Hort 341) course.

My Take on the Horticulture Program

Essentially all of the different options in the horticulture major prepare you for your future career. In the Landscape Design, Installation and Management option I have learned how to create designs that are not only pleasing to the eye, practical for the client, and creative, but also sustainable in our climate. I have also learned how to properly install these designs, including hardscapes and plants, so they might reach their highest potential. In this option you will also become very familiar with all of the landscaping plant material available for our area and their basic environmental needs.

In order to develop functional landscapes out in the industry you first must have a well-rounded education in horticulture. You will begin your coursework by learning the perennials and annuals that really thrive in our climate and what particular traits make them useful. Then you will take the woody landscape plants course to learn all of the trees and shrubs that perform well in the Midwest and the environmental requirements they need to do their best. Through the woody plant cultivar course you will then learn the specific cultivars that have proven themselves as great trees for our growing conditions. By the time you get into the design and installation courses you will have built a great understanding of our best plant material. Dr. VanDerZanden will

teach you how to combine the plant material with design concepts and hardscapes to create attractive and sustainable landscapes. Dr. Reinert will teach you how to install the different parts of a landscape and how to manage the installation process. In all of your classes you will have to do problem-solving to figure out the best way to do something. By the time you are finished with your coursework you will have a great understanding of the landscape industry including how to design, install and manage a landscape.



Outside of Class...

The best part about the Department of Horticulture is how close knit the students and professors are. We take great pride in the accomplishments of our department and students, and the faculty strive to keep an excellent reputation. But it's not all work, work, work!

The great part about being a student in the Department of Horticulture is that you have the opportunity to really get to know your fellow students. For the first year and half your advisor will make sure that you are enrolled in the general courses with all

started my classes, my advisor and peers made sure that all of us incoming freshmen got to know each other. We had literally all of the same classes together and they organized many outings for us to get to know each other. Suddenly college didn't seem so overwhelming anymore because now I had my own group of friends and we all had similar interests. There was always somebody I knew in my classes to help if there was a concept that I was struggling with, or to study with for a big exam. I cannot stress enough that the best way to feel like you're a part of the horticulture community is just to get involved.



the other horticulture majors who came in the same year as you. I know when I first came to Iowa State University from my small Iowa hometown the campus and student body was overwhelmingly BIG! There were five times more students enrolled here than citizens of the small farming community where I grew up. As I

Organizations

Horticulture Club is an extracurricular activity for all students interested in horticulture. It gives students a chance to get to know each other outside of class and take on some leadership responsibilities. The Horticulture Club puts on many activities such as a Welcome Back Barbeque at the beginning of the year, socials during dead week, a winter break party, and workshops. They also invite guest speakers from the horticulture industry to speak at the monthly meetings so we can learn about different areas of horticulture. It is a great way for us network with the local industry. For fundraisers, the club grows a number of different types of plants such as poinsettias, tulips and daffodils, annuals and perennials. It is a wonderful way to get to know people, network, and just have fun with horticulture!

There are also many other student organizations within the College of Agriculture and Life Sciences. The Ag Council is a group that brings together people from all of the Agriculture based clubs. They hold many fun activities throughout the year such as dances, barbeques, and livestock shows. This is an excellent opportunity for you as a student to get to know other students and professors outside of horticulture.

Competitions

Each year the Department of Horticulture sends students to national competitions. It gives students the opportunity to compete against their peers from other universities and colleges. They also get a chance to meet many other students and faculty in horticulture departments from around the nation and share ideas.

PLANET, the Professional Landcare Network, is a national organization which students can join while at Iowa State. Each year PLANET holds a major competition and tradeshow. We send students there to compete in the different areas. They get the opportunity to meet professionals and experts in the landscape design, construction and management fields. It gives them a chance to see all aspects of



horticulture that they may not get to know by just staying in Iowa.

MACHS (Mid American Collegiate Horticulture Society) is another competition that involves students from the 12 mid-American states: Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin.

Out in the industry...

We are greatly encouraged to complete internships during summer break or by taking a semester away from classes. We have sent students to well-known design firms, nurseries, and golf courses all over the country. If there is a place you have



always dreamt of working or exploring, you will be given that opportunity by becoming a horticulture major at Iowa State University. Our department has made such a reputation for itself that there are many companies who are specifically looking for our students to fulfill internship and full-time positions.

As a student in the Department of Horticulture and specializing in the Planting Design, Installation and Management option, the opportunities are endless. I hope my brief tour of the Department of Horticulture and description of my experiences as an undergraduate student has been informative and helped you become familiar with our program.

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