

**Bergen Community College**  
**Division of Mathematics, Science & Technology**  
**Department of Biology and Horticulture**

**Computer Applications for Landscape Design (HRT-114)**  
**General Course Syllabus**  
**Revised: Summer 2015**

**Semester and Year:**

**Section Number:**

**Meeting Times & Locations:**

**Instructor:**

**Office Location:**

**Phone:**

**Office Hours:**

**Email Address:**

**Course Description:** This course will introduce students to the Computer Aided Design (CAD) and quotation software used by professionals in the green industry. The course's focus is on learning to use industry standard computer software such as Dynascape to develop landscape design projects. Students should be familiar with basic computer functions before enrolling.

**Prerequisites:** None

**General Education Course:** No

**Course Credits:** 3.0

**Hours per Week:** 4.0: 2 hours lecture and 2 hours lab

**Course Coordinator:** Dr. Steven Fischer

**Required Text:** None

**Supplementary Text:** None

**Required Laboratory Manual:** None

**Supplementary Materials:** None

**Student Learning Objectives:**

**The student will be able to:**

1. Utilize the tools and functions of Dynascape Design software to draw and edit landscape drawings.
2. Create and format a standardized drawing which utilizes borders and title blocks.
3. Create and edit landscape plan elements
4. Add text, labels and import images to landscape drawings.
5. Prepare and insert plant lists into a landscape drawing.
6. Utilize data bases for aggressive labeling, speed, and accuracy.
7. Utilize estimating functions of Dynascape Quote to assemble KITS for quoting secondary materials and labor.
8. Maintain and amend data bases for customers, suppliers, labor and equipment.
9. Utilize traditional and electronic methods to create a colored presentation drawing.
10. Create three dimensional renderings using elements from Sketch-Up software.
11. Produce finished rendering from a CAD drawing.

12. Import and export CAD files.
13. Describe the pros and cons of using CAD as a design tool.

**Objectives will be assessed as follows:**

1. Demonstrate software skill capability by completing lab exercises in Dynascape functions and proper usage.
2. Ability to develop viable landscape drawings utilizing horticultural knowledge of plant materials, design principles and Dynascape CAD skills.
3. Demonstrate an understanding of the importance of labeling attributes and information databases by accurately estimating and quoting from Dynascape drawings.
4. Create color renderings by applying knowledge of layering system, digital image files and shadows to a finished project.

Assessment will be based on student performance in lab and the quality of finished projects incorporating the above learning objectives.

**Student Assessment Tools:**

The above student learning objectives will be generally assessed or evaluated by instructors using a variety of **assessment instruments** including **lecture exams, laboratory exams, quizzes, laboratory reports, written reports, presentations, projects, etc.** The decisions concerning the type or types and number of instruments that are used in a specific section of the course will be left to the instructor of that section. This information, when given by the instructor should be recorded by the student in the **Student Assessment Section** of this document.

**Course Content Schedule:**

**LECTURE #**

**LECTURE SCHEDULE**

**Week**

- |     |   |
|-----|---|
| 1   | Introduction to CAD. Discussion of the advantages and disadvantages of CAD as a design tool. Introduction to Dynascape software. Explanation of various software tools including but not limited to: the Dynascape screen, menus and prompts. Similarities and differences to other Windows based software and Dynascape's ability to interface with MS Office are presented. File management and drawing labeling conventions will be discussed. |
| 2   | Best practices for using Dynascape are introduced: opening a new drawing, opening an existing drawing, saving drawings and organizing files. Introduction to the basic Dynascape tools, functions and mouse conventions. Customizing the drawing window and moving the Draw and Edit toolboxes for ease of use.   |
| 3   | Working with raster files and importing files from other software is introduced. Importing, moving and resizing raster files into an existing drawing. Explore the various drawing and editing tools. Using the built in Library symbols.   |
| 4-5 | Complete a tutorial landscape plan. Using modes and layers to increase accuracy and productivity are explored. Measuring landscape elements for estimating.   |

- 6 Create labels and plant lists using Dynascape databases. Create labels without using the database and importing them to a drawing from Excel.
- 7-8 Introduction to Dynascape Quote. Utilizing, maintaining and customizing databases for use in estimating. Create databases for plant materials, estimates, quotes, and other reports. Practical application within an existing landscape plan.
- 9-10 Prepare an original materials list and estimate from a Dynascape landscape plan. Design and utilize KITS.
- 11-12 Introduction to SketchUp. Using a CAD generated landscape plan, students will learn how to manipulate that plan to create a 3-D rendering.
- 13-14 Dynascape Color and the creation of computer generated presentation drawings is introduced. Color set-up procedures for existing drawings are explained. and introduction to the production of a finished rendering from a CAD drawing. Discussion of pros and cons of alternative coloring techniques for presentation.
- 15 Final Project Presentations

**Faculty Addenda:**

**Lecture Attendance:**

**Lab Attendance:**

**Policy Concerning Late Assignments:**

**Policy Concerning Make-Up Testing:**

**Safety Information:**

**Other Class Policies:**

**Student Assessment:**

**Lecture Examinations %**

**Laboratory Component %**

**Student Project/Report %**

**Class Participation %**

**Other %**

**Total 100%**

**If you have a medical condition or develop a medical condition during this semester, which prevents you from fulfilling the requirements of this course, you must notify your physician. You and your physician must decide whether or not it is appropriate for you to remain in this course. If the decision is to remain in this course, please obtain a letter from your physician indicating that your continued participation in this course is appropriate and present it to the Department Chair.**

## **College Policies:**

### **Student Responsibility**

Students will be held responsible for reading all pertinent information in college publications regarding withdrawals, course drops, college deadlines, and tuition refunds. Students are responsible for compliance with the rules and regulations as stated in college publications.

### **Absence of Instructor**

Students are expected to wait twenty minutes for a faculty member to come to class. If at the end of twenty minutes, the faculty member does not come, the students should sign an attendance sheet, which indicates the course, date, and time. A student should deliver the attendance sheet to the divisional office (A304) if between 9:00 a.m. and 5:00 p.m. or to the Evening Office (C107) if before 9:00 a.m. or after 5:00 p.m. Students cannot be penalized by faculty for not waiting longer than twenty minutes.

### **Academic Dishonesty and Plagiarism**

Bergen Community College is committed to academic integrity – the honest, fair and continuing pursuit of knowledge, free from fraud or deception. Students are responsible for their own work. Faculty and academic support services staff will take appropriate measures to discourage academic dishonesty.

**Plagiarism** is a form of academic dishonesty and may be a violation of U.S. Copyright laws. Plagiarism is defined as the act of taking someone else's words, opinions, or ideas and claiming them as one's own.

### **Consequences of Violations Academic Integrity**

#### **A. Instructor's Sanctions for a Violation**

The faculty member will determine the course of action to be followed. This may include:

- Assigning a failing grade on the assignment;
- Assigning a lower final course grade;
- Failing the student in the course
- Other penalties appropriate to the violation;

In all cases, the instructor shall notify the Vice President of Student Services of the violation and the penalty imposed. The student has the right to appeal the decision of the instructor to the appropriate department head.

#### **B. Institutional Sanctions for Violations**

When a violation of academic integrity has been reported regarding a student, the Vice President of Student Services may impose disciplinary penalties beyond those imposed by the course instructor, which may include suspension or dismissal from the College. The student shall have the right to a hearing before the Vice President of Student Services or a designated judicial affairs committee. Judicial procedures governing violations of academic integrity are contained in the student handbook.

### **Class Attendance**

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

### **Eating and Drinking**

Eating or drinking in classrooms, lecture rooms, laboratories, gymnasium, swimming pool, or passageways is forbidden. Covered beverages only are permitted in the library. Eating and drinking are permitted in cafeteria and vending areas only.

### **Learning Assistance**

#### **Henry and Edith Cerullo Learning Assistance Center**

The Tutoring Center, English Language Resource Center, Math Walk-In Center and Writing Center are collectively known as the Henry and Edith Cerullo Learning Assistance Center. The Cerullo Learning Assistance Center is located in the Pitkin Education Building, in Room L-125. The telephone number is (201) 447-7489. The Learning Assistance Center, staffed with peer and professional tutors, offers free individual and group tutoring, supplemental instruction, and online tutoring for subjects offered at the College. The Center provides alternative approaches to problem solving and organizational skills. Tutors

help clarify classroom lectures and textbooks and help students prepare for exams. These services build student self-confidence and reduce fear of failure. The Center is equipped with the latest technology and software, including tapes, books, review sheets, exercises and software.

### **Services for Students with Disabilities**

The Office of Specialized Services/ Deaf Services, located in L-115 in the Pitkin Education Center provides accommodations and auxiliary services to students with disabilities attending Bergen Community College. Students are encouraged to submit documentation to OSS during the early stages of the admission process. The suggested deadlines for submitting documentation are as follows: August 1st for fall semesters, December 1st for spring semesters. For more information please contact our office at 201-612-5270 or at [www.bergen.edu/oss](http://www.bergen.edu/oss).

### **Sidney Silverman Library**

Main Building, Pitkin Education Center, L-wing, 2nd Floor.

Paramus Library Hours: (201) 447-7131 or visit <http://www.bergen.edu/library/calendar/gcal.htm>

Paramus Service Desk: (201) 447-7970

Meadowlands Location: 1280 Wall Street, Lyndhurst 2nd Floor

Meadowlands Library Hours: <http://www.bergen.edu/library/calendar/gcal.htm>

Meadowlands Service Desk: (201) 301-9692

[www.bergen.edu/library](http://www.bergen.edu/library)

### **Testing Services**

The Bergen Community College Office of Testing Services (OTS) is located in Room S-127. OTS serves the college community by identifying, developing, procuring, administering, processing, and/or evaluating examinations, which meet a variety of administrative and instructional needs. To contact the OTS, please call (201) 447-7202. The Office of Testing Services administers makeup tests as a service for students who, for compelling and exceptional reasons, have missed a scheduled classroom examination. Students must receive prior permission from and make arrangements with their course instructors to take these examinations, under specific conditions, in the Office of Testing Services, Room S-127.

### **WebAdvisor**

WebAdvisor is a web interface that allows students to access information contained in Datatel's Colleague, the administrative database used by Bergen Community College. Students may use WebAdvisor to register for classes, to pay tuition and fees, to view their class schedules, to check grades, to check on progress toward degree requirements, etc. WebAdvisor accounts are available for all students enrolled in credit programs. New students are strongly encouraged to attend an in-person registration or advisement session before using a WebAdvisor account. Eligible students without WebAdvisor user names and passwords may access their WebAdvisor account by going to [go.bergen.edu](http://go.bergen.edu) and selecting "I'm new to WebAdvisor." Then, follow the on-screen directions. Check the WebAdvisor FAQ for answers to common questions, such as how to reset your password. Students must have a valid e-mail address on file with the College to use WebAdvisor.