### BCT 244
#### Site Layout and Foundation Types

**Course Description**

The course covers the layout of building corners and elevations. Appropriate tools are used in the training. The class covers site selection criteria and optimal building locations to control passive energy sources. A survey of foundation types and the study of construction techniques are included. Lec. 3 Lab. 0 Cr. 3

**Course Focus**

The focus of the course is on the study of construction of a building foundation. Emphasis is placed on “green” building techniques outlined by the Leadership in Energy and Environmental Design (LEED) principles.

**Text and References**

Floyd Vogt, Carpentry, Fifth Edition, and workbook, Delmar Cengage
Published: 2010

**Course Goals**

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. achieve line layout accuracy
2. study construction techniques
3. display Pythagorean theorem method
4. determine elevation difference
5. establish layout lines
6. build batter boards
7. setup leveling and layout tools
8. use layout and leveling tools
9. establish various angles
10. comprehend local zoning ordinances
11. define key terms and concepts
12. comprehend floor plans
13. understand architectural plans
14. valuate foundation designs
15. calculate excavation and fill volumes
16. understand energy consumption reduction benefits
17. use basic building techniques
18. use basic building layout tools
19. control passive energy sources
20. select optimal building location
21. establish level points
22. factor concrete strength durability and workability
23. clean work area
24. disassemble concrete forms
25. practice concrete safety precautions
26. estimate concrete quantities
27. build concrete forms
28. construct concrete forms
29. create concrete batch
30. adjust layout and leveling tools
31. illustrate proper concrete placement and curing techniques
32. reduce and recycle concrete waste
33. characterize concrete composition
34. wear protective clothing
35. depict concrete characteristics
36. install batter boards
37. find survey rods
38. place building stakes
39. follow laser safety precautions
40. set straight line points
41. read measuring instruments
42. measure angles
43. know slump test reasons

Student Contributions

The student is expected to be prepared for class and to be in class on time.
Test materials are weighed heavily in favor of lecture materials.
The student will complete all assignments.
The student is required to observe and practice all lab safety rules.
All cell phones and pagers must be silenced during class.

Course Evaluation

The grade scale is as follows:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89</td>
<td>B</td>
</tr>
<tr>
<td>70 – 79</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
</tr>
</tbody>
</table>

Course grades will be determined from the following weighting scheme:

- Attendance/Notebook Review/Homework completion: 20%
- Quizzes: 60%
- Final: 20%

Course Schedule

The class meets for 1 lecture for 2.75 hours per week.
ADA Statement

The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

Academic Misconduct

There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student’s responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center.

Attendance

The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

- Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
- Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
- Reinstatement requires the signature of the division dean.

In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student’s responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.

When a student exceeds the allowed absences; the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of “W”, “WP”, or “WF” depending on the date the student exceeded the allowed absences and the student’s progress up to the last date of attendance or under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded. Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
- A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

A copy of TCL’s STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.
Hazardous Weather

In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

Emergency Text Message Alert

Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to www.tcl.edu. On the homepage, click on “emergency TextAlert at TCL” and fill out the form or go to www.tcl.edu/textalert.asp

Developed/Revised: 1-10-2011