

**Course Evaluation Measures Menu**

**Course number:** CET 244

**Course title:** Principles of Site Development

**Campus location(s):** Georgetown, Stanton

**Effective Semester:** 2022-51

**Core Course Performance Objectives**

1. Demonstrate proper drafting techniques.

(CCC 1, 2, 3, 4; PGC: CET 1, 4, 5; SET 1, 4, 6; CTO 1, 2, 4)

1. Differentiate among the various drawings that make up a set of subdivision plans, and identify and explain the various items included in each drawing using proper terminology.

(CCC 1, 2, 3, 4, 5; PGC: CET 1, 4, 5; SET 1, 4, 6; CTO 1, 2, 4)

1. Design and develop a residential, commercial, or mixed-use site plan applying zoning and subdivision ordinances and governmental regulations.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 4, 5; SET 1, 4, 5, 6; CTO 1, 2, 4)

1. Assess a site to determine the feasibility for development.

(CCC 1, 2, 5; PGC: CET 1, 5; SET 1, 6; CTO 1, 3, 4)

1. Design the vertical and horizontal elements of a road, and produce a preliminary traffic study and design roadway intersections.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 3, 4, 5; SET 1, 3, 4, 5, 6; CTO 1, 2, 3, 4)

1. Develop a detailed surface model from 3D linework, objects, road profile, and sections.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 4; SET 1, 4, 5, 6; CTO 1, 2, 4)

1. Calculate critical design elevations for proposed utilities such as storm sewer, sanitary sewer, and water service.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 3, 5; SET 1, 3, 5, 6; CTO 1, 3, 4)

1. Formulate all design computations necessary to produce subdivision plans.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 3, 4, 5; SET 1, 3, 4, 5, 6; CTO 1, 2, 3, 4)

1. Produce design plans from a CADD site model.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 3, 4, 5; SET 1, 3, 4, 5, 6; CTO 1, 2, 4)

1. Demonstrate professional and ethical conduct as expected in industry.

(CCC 1, 2, 3, 4, 5, 6; PGC: CET 1, 4, 5; SET 1, 5, 6; CTO 1, 2, 4)

**Summative Evaluations**

*Please note: All courses must have a* ***minimum******of four*** *summative evaluation measures, and those measures should include a variety of evaluation methods (e.g., test, oral presentation, group project).* ***Please list all summative evaluation measures.*** *In addition to these summative measures, a variety of formative exercises/quizzes/other assignments should be used to guide instruction and learning* *but do not need to be included on this template.*

*For each measure, please include a scope of the assignment: for example, if requiring a research paper, include the range of required number of words and number and types of sources; for a test, include the types and number of questions; for a presentation, include the minimum and maximum time, and so on.*

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| **Evaluation Measures:** Include each agreed upon measure and scope of that measure (see above). | **Which CCPO(s) does this evaluation measure?**  |
| **Final Presentation (Summative)*** Present a complete preliminary submission based on local land use agency regulations and policies.
* Each member of team shall present a topic or design item for a minimum of 5 minutes.
* Overall presentation should be clear and concise, and students will take questions from the audience of professionals in the field.
* Students will prepare a visual presentation to accompany their oral description of the project.
 | **2, 3, 4, 5, 6, 7, 10** |
| **Design Project (Summative)*** Site Inventory & Feasibility Study
	+ Tract location
	+ Zoning
	+ Site inventory data
	+ Site selection study
	+ Natural resources data
	+ Yield analysis
	+ Site analysis map
	+ Written using standard industry format
	+ Resources cited using APA format
* Proposed Site Layout Sketch
	+ Individual concept sketch hand drafted on trace paper overlay meeting all applicable municipal and industry standards.
	+ Informal meeting/presentation of concept sketch and all requirements per municipal and industry standards.
	+ Collaborative concept sketch developed from individual concept sketches, hand drafted on trace paper overlay meeting all applicable municipal and industry standards.
* Traffic Operational Analysis Report
	+ Trip generation diagram per applicable municipal and industry standards.
	+ Required entrance improvements per applicable municipal and industry standards.
	+ Required sight triangle diagrams per applicable municipal and industry standards.
	+ Narrative per applicable municipal and industry standards.
* Stormwater Management Design
	+ Pre-development drainage plan and calculations using NRCS method per municipal and industry standards.
	+ Preliminary proposed stormwater management design containing a basic sketch with preliminary proposed structures, impervious surfaces and proposed stormwater management best management practices per municipal and industry standards.
* Rough Engineering Calculations
	+ Sanitary sewer and/or storm sewer pipe layout design.
	+ Calculation of proposed elevations for pipe layouts.
	+ Calculation of proposed road/site elevations.
	+ Design proposed typical road cross sections per applicable municipal and industry standards.
	+ Compute volumes of materials required.
* Mid-Review Preliminary Design Presentation
	+ Present design status at mid-semester.
	+ Each member of team shall present a topic or design item for a minimum of 5 minutes.
	+ Overall presentation should be clear and concise and students will take questions from the audience.
	+ Students will prepare a visual presentation to accompany their oral description of the project.
* Initial Plan Submission
	+ Students submit paper copies of design project plan set per requirements defined by local municipal codes to include record plan, sanitary sewer layout, and pre-development drainage plan at a minimum.
	+ Students submit paper copies of all applications and reports to support design project plan set as defined by local municipal codes.
* Final Submission
	+ Students submit paper copies of design project plan set per requirements defined by local municipal codes and comments from all previous submissions to include record plan, sanitary sewer layout, pre-development drainage plan, post development stormwater plan, grading plan, and road plan and profile at a minimum.
	+ Students submit paper copies of all applications and reports to support design project plan set as defined by local municipal codes.
 | **1, 2, 3, 4, 5, 6, 7, 8, 9, 10** |
| **Self-Reflective Project Narrative (Summative)*** Narrative describing concept behind project design, development of project, student’s contribution and reflection.
* Minimum of 500 words, typed, double-spaced, 1-inch margins
* Times New Roman or Arial font, 12 point, following APA format
 | **1, 2, 3, 4, 5, 6, 7, 8, 9, 10** |
| **Professionalism Assessment (Summative)*** Assignments such as Time Sheets, Resume, & Cover Letter
* Students will be assessed their overall work ethic and professionalism by the instructor of record.
 | **10** |

**FINAL COURSE GRADE**

(Calculated using the following weighted average)

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| **Evaluation Measure** | **Percentage of final grade** |
| Summative: Final Presentation  | 30% |
| Summative: Design Project* Site Inventory & Feasibility Study (2.5%)
* Proposed Site Layout Sketch (2.5%)
* Traffic Operational Analysis Report (2.5%)
* Stormwater Management Design (2.5%)
* Rough Engineering Calculations (2.5%)
* Mid-Review Preliminary Design Presentation (2.5%)
* Initial Plan Submission (5%)
* Final Submission (10%)
 | 40% |
| Summative: Self-Reflective Project Narrative  | 2.5% |
| Summative: Professionalism Assessment  | 7.5% |
| Formative: (Assignments: Question Sets, Class Homework and In-class Activities) | 20% |
| TOTAL | 100% |

 (Electronic Signature Permitted)

**Submitted by (Collegewide Lead):** \_Diane M. Calloway\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_05/28/2020\_\_\_\_\_

**[x]  Approved by counterparts**  Date \_\_\_\_05/28/2020

**[x]  Reviewed by Curriculum Committee**  Date \_\_\_6/16/20\_\_\_\_\_\_\_\_\_\_\_\_