

**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\_\_\_\_\_

**Approved by counterparts**  Date \_\_\_\_05/28/2020

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