



NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Dr. William S. Carver, II
Interim President

October 22, 2020

MEMORANDUM

TO: Presidents
Chief Academic Officers

FROM: Lisa M. Eads, Associate Vice President
Programs

SUBJECT: State Board Action on October 16, 2020
New Curriculum Standard

On October 16, 2020, the State Board of Community Colleges approved curriculum courses and a curriculum standard for the following new curriculum program:

Environmental Planning and Development (A55350)

*A Tier 2 funding classification for the new **Environmental Planning and Development (EPD and TRL)** curriculum prefixes have been approved.*

If you have any questions concerning the State Board action item, please contact Dr. Lisa Eads at 919.807.7133 or eadsl@nccommunitycolleges.edu. An outline of the new courses, new curriculum standard is attached for your convenience. You may view all curriculum standards and courses by visiting the Programs website at:

<http://www.nccommunitycolleges.edu/academic-programs/curriculum-standards>

LE/gr

Attachments

c: Dr. Kimberly Gold
Dr. Lisa Eads
Mr. Bryan Jenkins
Program Coordinators

CC20-062
Email

CURRICULUM STANDARD

<i>Effective Term</i> Fall 2021 [2021*03]

Curriculum Program Title	Environmental Planning and Development	Program Code	A55350
Concentration	(not applicable)	CIP Code	03.0206

Curriculum Description

This curriculum is designed to provide students with the knowledge and skills for employment and growth in the environmental and outdoor recreation industry. Graduates will be prepared to plan, design, construct, assess and manage outdoor recreational assets.

Coursework includes topics related to environmental planning, outdoor recreation, outdoor asset design, policy mandates, and effective management techniques. Course work will be taught through lecture, discussion, experiential activities, and fieldwork.

Graduates of this program should qualify for employment with non-profits, government agencies, landscaping, outdoor companies, and other environmental and recreational entities. Graduates of this program will have the skills to pursue entrepreneurial opportunities.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.10]

- I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. **Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1

*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.

Major Hours

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

- B. Concentration** *(if applicable)*. A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.

- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Environmental Planning and Development A55350

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE	25 or 26 SHC	25 or 26 SHC	

Required Courses:

EPD 111	Intro to Env. Plan. & Dev.	2 SHC
TRL 110	Int. to Tr., Blwys. & Grwys.	2 SHC

Select one of the following courses:

EPD 180	Plan. & Des. Pro. Vis. Tech.	3 SHC
GIS 111	Introduction to GIS	3 SHC

Select one of the following courses:

EPD 115	Env. Plan., Des. & Layout	3 SHC
LAR 242	Planning & Environments	3 SHC

Select one of the following courses:

EPD 220	Land Use MAPC	3 SHC
TRL 220	Sustainable Trail MAPC	3 SHC
BUS 148	Survey of Real Estate	3 SHC

Required Subject Areas (Select one of the following three subject areas):**Environmental Planning**

EPD 200	Env. Plan. and Land Use	3 SHC
EPD 230	Pub. Pl., Part. & Comm. Eng.	3 SHC

Select one of the following courses:

TRL 253	Comm. Paths & Placemaking	3 SHC
PAD 253	Intro to Urban Planning	3 SHC

Select one of the following courses:

AGR 160	Plant Science	3 SHC
GEO 130	General Physical Geography	3 SHC

Outdoor Economy & Development

BUS 110	Introduction to Business	3 SHC
BUS 139	Entrepreneurship I	3 SHC
MKT 120	Principles of Marketing	3 SHC

Select one of the following courses:

ODL 284	Principles of Ecotourism	3 SHC
REC 122	Program Administration	3 SHC
ACC 120	Prin. of Financial Accounting	4 SHC

Trails & Outdoor Recreation Infrastructure

TRL 210	Work Crew Lead. & Risk Mgt.	2 SHC
EPD 125	Parks, Land. & Tr. Mn. Tech.	3 SHC

Select one of the following courses:

EPD 120	Rec. Struct. Const. Tech.	4 SHC
TRL 120	Sus. Trail Const. Tech.	4 SHC
LAR 112	Landscape Materials & Methods	4 SHC

Select one of the following courses:

AGR 160	Plant Science	3 SHC
GEO 130	General Physical Geography	3 SHC

B. CONCENTRATION <i>(Not applicable)</i>			
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> ACC, AGR, ART, BIO, BPR, BUS, CAR, CEG, CHM, CIS, CMT, CST, DFT, ECO, ENV, EPD, FOR, FWL, GEL, GEO, GIS, HEO, HET, HOR, IVS, LAR, LID, LSG, MAS, MKT, MNT, ODL, OMT, PAD, PHS, PMT, REC, SRV, TRE, TRL, WBL			

Proposed Environmental Planning and Development Courses (EPD) and Trails (TRL) Courses

*Effective Term – Fall 2021 [2021*03]*

**EPD 111 Intro. to Env. Plan. & Dev.
(Introduction to Environmental Planning and Development)**

Class 2 Lab 0 Clinical 0 Work 0 Credit 2

Prerequisites: None

Corequisites: None

This course introduces the history, philosophy, and current trends in environmental planning, development, and land use management. Topics include the history and principles of environmental planning, regional planning, natural systems, community partnerships, and local policies and procedures. Upon completion, students should be able to clearly articulate the key issues and background information in environmental planning and current trends in the field.

**EPD 115 Env. Plan., Design, & Layout
(Environmental Planning, Design, and Layout)**

Class 1 Lab 4 Clinical 0 Work 0 Credit 3

Prerequisites: None

Corequisites: None

This course covers planning, design, and layout of outdoor recreational and leisure infrastructure projects for multiple uses. Topics include desktop planning, field design and layout, and corridor and pin flagging of sites and trail plans. Upon completion, students should be able to read and utilize various types of maps and layouts for planning and design of recreational sites with proficient use of appropriate tools.

**EPD 120 Rec. Struct. Const. Tech.
(Recreation Structures Construction Techniques)**

Class 2 Lab 4 Clinical 0 Work 0 Credit 4

Prerequisites: None

Corequisites: None

This course covers construction techniques used for parks and outdoor recreation structures and infrastructures. Emphasis is placed on the use of the required tools used for the construction of recreational structures. Upon completion, students should be able to use a

variety of hand tools and mechanized equipment to construct or repair recreational structures and shelters.

**EPD 125 Parks, Land. & Tr. Mn. Tech.
(Parks, Landscapes, and Trail Maintenance Techniques)**

Class 2 Lab 4 Clinical 0 Work 0 Credit 4

Prerequisites: None

Corequisites: None

This course covers park, recreation, and trail maintenance techniques for recreational land and sustainable, traditional natural surface trails using hand tools and mechanized equipment. Emphasis is placed on the use of the required tools used for the maintenance of recreational sites. Upon completion, students should be able to use a variety of hand tools and mechanized equipment to maintain park facilities, surface trails, and other recreational infrastructure.

**EPD 180 Plan. & Des. Pro. Vis. Tech.
(Planning and Design Projects Visualization Techniques)**

Class 3 Lab 0 Clinical 0 Work 0 Credit 3

Prerequisites: None

Corequisites: None

This course introduces the basic skills and concepts of drafting, mapping, or graphical design necessary to complete trail layouts, landscape site plans, or topographical drawings. Topics include surveying the drafting and mapping of recreational site techniques including GIS, design software computer drafting, and hand drawing applications. Upon completion, students should be able to select and utilize the proper techniques and applications used for the planning and design of recreational sites.

**EPD 200 Env. Plan. & Land Use
(Environmental Planning and Land Use)**

Class 3 Lab 0 Clinical 0 Work 0 Credit 3

Prerequisites: EPD 111 Introduction to Environmental Planning

Corequisites: EPD 115 Environmental Planning, Design, and Layout

This course includes an overview of the role of planning in land use and environmental outcomes and an examination of contemporary public policy issues related to environmental systems. Topics include environmental planning, managing human and environment

interactions, watersheds, resilience, conservation, habitats, hazard mitigation and smart growth management. Upon completion, students should be able to explain the functions of land use planning in society and in environmental systems that support communities and the outcomes from these decisions.

**EPD 220 Land Use MAPC
(Land Use Management, Assessment, Permitting, & Contracting)**

Class 2 Lab 2 Clinical 0 Work 0 Credit 3

Prerequisites: EPD 111 Introduction to Environmental Planning

Corequisites: None

This course covers sustainable management, assessment, permitting, and contracting for land use projects. Topics include site analysis, project program description, determining permitting requirements for projects, and developing project contracts. Upon completion, students should be able to develop a project assessment report addressing existing environmental conditions and proposed improvements, permitting requirements, contracting and current topics in land use management.

**EPD 230 Pub. Pl., Part. & Comm. Eng.
(Public Planning, Participation, & Community Engagement)**

Class 3 Lab 0 Clinical 0 Work 0 Credit 3

Prerequisites: EPD 111 Introduction to Environmental Planning

Corequisites: EPD 115 Environmental Planning, Design, and Layout

This course provides an overview of the role of impacted populations on the public planning processes, historical examples, and examinations of contemporary participation issues. Topics include the different public planning participation approaches, a history of planning processes, and community engagement skill development. Upon completion, students should be able to demonstrate the functions of public participation in planning, local democracy, and community problem-solving related to environmental planning processes.

EPD 250 Regional Resilience

Class 3 Lab 0 Clinical 0 Work 0 Credit 3

Prerequisites: EPD 111 Introduction to Environmental Planning

Corequisites: EPD 200 Environmental Planning and Land Use

This course includes an overview of the different roles and strategies of government, nonprofit, and private enterprises to adjust and restore key services and functions during environmental acute or chronic crises. Topics include various levels of government and public services,

regional collaborations, and best planning practices relative to environmental, social, and financial vulnerabilities. Upon completion, students should be able to demonstrate the functions and strategies for planning government services under regional conditions of duress.

**TRL 110 Int. to Tr., Blwys. & Grwys.
(Introduction to Trails, Blueways, and Greenways)**

Class 2 Lab 0 Clinical 0 Work 0 Credit 2

Prerequisites: None

Corequisites: None

This course introduces the history, philosophy, and current trends in trail, blueway and greenway planning, development, and management. Topics include the history, traditions, and principles of sustainable trails, regional trail planning, traditional natural surface trails, blueways, greenways, partnerships, and the user experience. Upon completion, students should be able to clearly demonstrate the relevance of the evolution of trails, blueways, greenways and current trends in the field.

**TRL 120 Sust. Trail Const. Tech.
(Sustainable Trail Construction Techniques)**

Class 2 Lab 4 Clinical 0 Work 0 Credit 4

Prerequisites: None

Corequisites: None

This course covers sustainable trail construction techniques that minimize the effects of natural and user impacts on trails while enhancing the user experience. Emphasis is placed on the use of the appropriate tools used for the construction of sustainable trail structures and natural surfaces. Upon completion, students should be able to use a variety of hand tools and mechanized equipment to construct natural surface sustainable trails.

**TRL 210 Work Crew Lead. & Risk Mgt.
(Work Crew Leadership and Risk Management)**

Class 2 Lab 0 Clinical 0 Work 0 Credit 2

Prerequisites: TRL 110 Introduction to Trails, Blueways, and Greenways

Corequisites: TRL 120 Sustainable Trail Construction Techniques

This course covers the different management skills used to effectively lead and supervise park volunteers and trail workers. Topics include effective management skills including the safety, risk management and group dynamics of park volunteers and trail workers. Upon completion, students should be able to demonstrate the knowledge, judgement, safety, risk management and supervisory skills necessary to lead and manage a work crew.

**TRL 220 Sustainable Trail MAPC
(Sustainable Trail Management, Assessment, Permitting, & Contracting)**

Class 1 Lab 4 Clinical 0 Work 0 Credit 3

Prerequisites: TRL 110 Introduction to Trails, Blueways, and Greenways

Corequisites: TRL 120 Sustainable Trail Construction Techniques

This course covers the different aspects of trail management, assessment, permitting, and contracting for sustainable and traditional natural surface trails. Topics include the assessment of trail condition, maintenance, safety, permit requirements and developing contracts for trail construction, maintenance, and management. Upon completion, students should be able to develop a trail assessment report that includes maintenance schedules, wet weather trail management, trail conditions, signage, trail facilities, proposed improvements, permit and contract requirements.

TRL 225 Universal Trail Assessment

Class 2 Lab 3 Clinical 0 Work 0 Credit 3

Prerequisites: TRL 110 Introduction to Trails, Blueways, and Greenways & TRL 120 Sustainable Trail Construction Techniques

Corequisites: None

This course covers the Universal Trail Assessment Process (UTAP) and High Efficiency Trail Assessment Process (HETAP) to objectively document the actual conditions in outdoor, natural environments. Topics include the use of objective measurements, collection of trail data, dissemination of information to trail users, universal design, the Americans with Disabilities Act and related accessibility mandates that affect trails and other outdoor recreation routes. Upon completion, students should be able to demonstrate the use of UTAP, HETAP and associated equipment for trail assessment according to the trail accessibility guidance and legislation.

TRL 253 Comm. Paths & Placemaking

Class 3 Lab 0 Clinical 0 Work 0 Credit 3

Prerequisites: EPD 111 Introduction to Environmental Planning and Development & TRL 110 Introduction to Trails, Blueways, and Greenways

Corequisites: EPD 200 Environmental Planning and Land Use

This course includes an overview of the role of walking, walkability, and site design for accessing outdoor recreation, economic, and public spaces within neighborhoods, towns and municipalities. Topics include urban and suburban planning techniques for analyzing walkability, outdoor recreation, asset-based development, and aesthetic design enhancements.

Upon completion, students should be able to demonstrate the benefits of outdoor recreation, economic and public spaces in neighborhoods, towns and municipalities and how it relates to the asset-based development, aesthetic enhancement and other community services design projects.