



UNIVERSITY OF  
NORTHERN  
COLORADO

# University of Northern Colorado Spring 2020 Addendum

The Spring 2020 Addendum contains Graduate and Undergraduate programs and courses effective for Spring 2020 term.

The programs and courses will be published to the 2020-2021 catalog.

# New Undergraduate & Graduate Programs

## CLD (Culturally and Linguistically Diverse) Education Core Graduate Certificate

### College of Education and Behavioral Sciences

The 12 credit CLD Core Graduate Certificate program provides licensed K-12 teachers with the opportunity to develop knowledge, skills, and disposition needed to work with CLD students in the U.S. K-12 classrooms. The certificate will help teachers fulfill one of the licensure renewal requirements in Colorado. All coursework in the program will count towards a CDE recognized CLD endorsement program offered at UNC.

### Certificate Requirements - 12 credits

#### Admission Requirements:

For admittance to the certificate program, students should be successfully admitted to the Graduate School at UNC as a degree or non-degree seeking graduate student, including:

- An earned Bachelor's degree from an accredited institution;
- GPA of 3.00 or better, on a 4.00 point scale, from the most recent degree earned or current degree in progress;
- Teaching licensure or enrollment in a teacher preparation program.

### Certificate Requirements

#### Required Credits – 12 credits

Take all of the following:

<a href="#">ECLD 594</a>	Foundations of Language and Linguistics for ESL/Bilingual Educators	3
<a href="#">ECLD 603</a>	Methods and Assessment in Culturally & Linguistically Diverse Education	3
<a href="#">ECLD 604</a>	Field Experience in Culturally & Linguistically Diverse Education	3

Choose one of the following:

<a href="#">ECLD 592</a>	Second Language Acquisition Theory	3
<a href="#">ECLD 593</a>	Language, School and Society	3
<a href="#">ECLD 602</a>	Teaching Culturally & Linguistically Diverse Learners	3

[ECLD 593](#) or [ECLD 602](#) may be taken with approval from program coordinator.

# New Undergraduate & Graduate Courses

## College of Education and Behavioral Sciences

### [PSY 340 Psychology and Culture](#)

Explore how sociocultural contexts impact psychological processes. Topics include cultural issues in research and testing, cultural differences in worldviews and communication, acculturation, stereotyping, cultural identity development, and culture and health.

Credits: 3

### [PSY 566 Programming for Experimental Psychology](#)

Overview of the fundamentals for creating experiments and data analysis for experiments in psychology.

Credits: 3

Special Notes: Previous coursework in statistics; Consent of Instructor.

Class Restriction: Exclude Freshman and Sophomore

### [SPSY 627 Philosophical Underpinnings of Applied Behavior Analysis](#)

Topics include the philosophical assumptions underlying the science of ABA, descriptions and explanations of behavior, the experimental analysis of behavior, and professional practice guided by the science of behavior analysis.

Credits: 2

Level Restriction: Include GR

## College of Humanities and Social Sciences

### [CHIN 107 Conversational Chinese for Beginners](#)

Introductory course in basic Mandarin Chinese oral communication in familiar, everyday contexts. Focus on listening and speaking, some character recognition, writing. For learners with limited or no prior Chinese language experience.

Credits: 3

### [ENG 230 Introduction to Comics](#)

An Introduction to comics and print culture, including historical development from the nineteenth-century comic strip to the freestanding graphic novel. Interpretation of visual form, narrative structure, and cultural impact.

Credits: 3

### [HUM 200 Cultural Rhetorics](#)

An examination of how colonized, non-Western, and/or marginalized cultures define their own rhetorics and negotiate how they intersect with hegemonic Western rhetoric.

Credits: 3

## College of Natural and Health Sciences

### [BREW 320 Sensory Analysis of Beer](#)

(0.5 lecture, 1 lab) Introduction, discussions, methods and applications of various topics in the sensory evaluation of beer styles and common off-flavors present during the brewing process.

Credits: 0-1

### [BREW 471 Fermentation in Brewing](#)

Study of fermentation in beer brewing from the biochemical, technical, and practical aspects. Focus on metabolism, methods that influence metabolism, and chemical analyses that evaluate fermentation.

Credits: 3

Prerequisites: [BREW 370](#): with minimum grade of D-

### [BREW 492 Internship](#)

On-the-job experience in the brewing industry under the supervision of an area specialist.

Credits: 1-9

Special Notes: Consent of instructor required.

### [BREW 495 Special Topics in Brewing Laboratory Science](#)

Study of special topics in brewing and brewing laboratory science. Variable topics.

Credits: 1-3

Course Attribute: Variable Title Course

Repeatable Status: ST - Repeatable under different subtitles with no limits on the number of times it can be repeated

### [CS 456 Neural Networks and Deep Learning](#)

This course examines state-of-the-art AI approaches to deep learning using neural networks. Students will learn to design neural network architectures and training procedures via hands-on assignments and projects.

Credits: 3

Prerequisite: MATH 311: with minimum grade of C or MATH 221: with minimum grade of C and MATH 233: with minimum grade of C and CS 120: with minimum grade of C

### [CS 489 Project in Data Science](#)

This is a project course in data science and related fields. Interdisciplinary teams will analyze a new data science problem, develop a model, and control for error and overfitting.

Credits: 2

Prerequisite: STAT 411: with minimum grade of C

Mutually Exclusive Course Credit allowed for only one of these courses: CS 489 and STAT 489

### [FND 625 Advanced Maternal and Child Nutrition](#)

Advanced study of pre-conception, pregnancy, lactation, infancy, and child nutrition including nutrient requirements, mealtime behaviors, and common nutrition related conditions incorporating evidence-based research in maternal and child nutrition.

Credits: 3

Prerequisite: FND 570: with minimum grade of C

Level Restriction: Include GR

### **FND 655 Sports Nutrition**

Provide an overview of the roles nutrient selection, metabolism and timing play in supporting and improving human physical performance. Course includes thorough review of current literature in Sports Nutrition.

Credits: 3

Prerequisite: FND 570: with minimum grade of C

Level Restriction: Include GR

### **MATH 311 Mathematics and Statistics for Data Science**

Mathematical and statistical topics relevant to Data Science. Background on multivariable functions and calculus, probability, and advanced linear algebra for tools used in Data Science.

Credits: 3

Prerequisite: CS 120: with minimum grade of C and MATH 221: with minimum grade of C

### **STAT 489 Project in Data Science**

This is a project course in data science and related fields. Interdisciplinary teams will analyze a new data science problem, develop a model, and control for error and overfitting.

Credits: 2

Prerequisite: STAT 411: with minimum grade of C

Mutually Exclusive Course Credit allowed for only one of these courses: CS 489 and STAT 489