



UNIVERSITY OF
**NORTHERN
COLORADO**

University of Northern Colorado Spring 2022 Addendum



The Spring 2022 Addendum contains Graduate and Undergraduate programs and courses effective for the Spring 2022 term.

The programs and courses will be published in the 2022-2023 catalog.

New Graduate Programs

Brewing Laboratory Science Graduate Certificate Program

College of Natural and Health Sciences

Department of Chemistry and Biochemistry

This 9-credit hour certificate provides preparation in brewing laboratory science. It is designed for those interested in obtaining work within the brewing industry, starting their own brewery or brewery laboratory, or continuing their education in brewing laboratory science.

Requirements for admission to the certificate program are successful completion of an undergraduate certificate in brewing laboratory science or a 4-year degree in Chemistry, Biology, Physics, Mathematics, Geology, or related science.

Certificate Requirements — 9 Credits

Take 3 credit hours in each topic area:

Laboratory Science (3 hours required)

BREW 570	Practical Brewing Science	3
BREW 622	Directed Studies	1-3
BREW 695	Special Topics in Brewing Laboratory Science	1-3

Experiential Learning (3 hours required)

BREW 579	Advanced Brewing Laboratory Science	3
BREW 692	Internship	1-9

Brewery and Laboratory Design (3 hours required)

BREW 580	Brewery Operations	3
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New Graduate Courses

College of Humanities and Social Sciences

Department of English

ENG 610 – Interventions in Literacy

This course will help individuals effectively select and implement research-based literacy interventions as they relate to students' strengths and needs at individual student, classroom, and school-wide levels.

Credits: 3

Offered: Generally offered Fall, Spring, and/or Summer - Check with department/school for next offering

Mutually Exclusive: Course Credit allowed only for one of these courses: ENG 610 or EED 610

Level Restriction: Include GR

College of Natural and Health Sciences

School of Biological Sciences

BIO 536 – Epigenetics and Disease

Introduction to the mechanisms of epigenetic control of gene expression, including methods used in epigenetic research, interactions between epigenetics and the environment, and the role of epigenetics in human disease.

Credits: 3

Offered: Generally offered Fall - Check with department/school for next offering

Prerequisite: BIO 220 with a minimum grade of C

Class Restriction: Exclude Freshman and Sophomore

BIO 587 – Advanced Immunology

Advanced exploration of humoral, cellular, and innate immunology; reproductive, transplant, and cancer immunology; allergies, hypersensitivities, and autoimmunity.

Credits: 3

Prerequisite: (BIO 381 or BIO 547 with a minimum grade of C)

Class Restriction: Exclude Freshman and Sophomore

Department of Chemistry and Biochemistry

BREW 570 – Practical Brewing Science

Students must be 21+ years old (photo ID required at first class session). Detailed investigations brewing with focus on the QA/QC applications to beer production. Key analyses include analysis of water, malt, hops, wort and beer. Detailed evaluation of beer via experimentation and sensory evaluation will be conducted. A project-based component is required.

Credits: 3

Offered: Generally offered Summer Annually

Mutually Exclusive: Course Credit allowed for only one of these courses: BREW 570 and BREW 470

Class Restriction: Exclude Freshman and Sophomore

BREW 579 – Advanced Brewing Laboratory Science

(1 lecture, 6 laboratory) Students must be 21+ years old (photo ID required at first class session). Application of brewing laboratory science methods of malt, wort, and beer analysis during the production of microbrewery scale quantities of beer. A project-based component involving the creation of a quality assurance program for the operation of a microbrewery is required.

Credits: 3

Prerequisites: BREW 570 with a minimum grade of B

Offered: Generally offered Summer Annually

Mutually Exclusive: Course Credit allowed for only one of these courses: BREW 579 and BREW 479

Class Restriction: Exclude Freshman and Sophomore

BREW 580 – Brewery Operations

Students must be 21+ years old (photo ID required at first class session). Analysis/design of brewery operations from malt intake to product distribution. A project-based course exploring beer production, facility design, and quality control. Focus on employee safety, HACCP, and FSMA principles.

Credits: 3

Prerequisites: BREW 579 with a minimum grade of C

Offered: Generally offered Fall Annually

Class Restriction: Exclude Freshman and Sophomore

BREW 622 – Directed Studies

Individualized investigation under the direct supervision of a faculty member. Minimum of 37.5 clock hours required per credit hour.

Credits: 1-3

Special Notes: Maximum concurrent enrollment is two times.

Level Restriction: Include GR

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

BREW 692 – Internship

On-the-job experience in the brewing industry under the supervision of an area specialist. S/U graded.

Credits: 1-9

Special Notes: Consent of instructor required.

Level Restriction: Include GR

Repeatable Status: Course is repeatable with no limitations

BREW 695 – Special Topics in Brewing Laboratory Science

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

Credits: 1-3

Offered: Generally offered Fall and/or Spring - Check with department/school for next offering

Level Restriction: Include GR

Course Attribute: Variable Title Course

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

Department of Community Health Education

CH 568 – Rural Community Health Issues

A study of social, economic, political, and cultural influences that impact the health of individuals and families in rural communities. This course focuses on improving health status and developing culturally appropriate and effective interventions and services in rural settings.

Credits: 3

Class Restriction: Exclude Freshman and Sophomore

School of Special Education

EDSE 627 Philosophical Underpinnings of Applied Behavior Analysis

This course covers 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. This course is based upon the BACB[®] 5th edition Task List.

Credits: 2

Offered: Generally offered Fall and/or Spring Annually

Level Restriction: Include GR

EDSE 631 Applied Behavior Analysis II

This course covers individual and systematic behavioral interventions, including antecedent interventions, contingency contracting, group contingencies, consequence-based strategies, and token economies.

Credits: 4

Offered: Generally offered Fall and/or Spring Annually

Prerequisite: SPSY 628

Level Restriction: Include GR

School of Sport and Exercise Science

SES 601 – Statistics in the Movement Sciences

Presentation of data, measures of central tendency and variability, inference, correlation, regression, comparisons of means, and specific statistical approaches used in the movement sciences will be presented and applied.

Credits: 3

Program Restrictions: Include SES:Biomechanics-MS and SES:Exercise Physiology-MS and SES:Sport Administration-MS and SES:Sport Administration-MS and SES:Soc Psych Sprt Phy Act-MS

Level Restriction: Include GR

College of Performing and Visual Arts

School of Theatre Arts and Dance

THED 500 – Academic Writing in Theatre Education

In this first course in the MA in Theatre Education program, students will learn the fundamentals of writing expectations for graduate level work.

Credits: 3

Program Restriction: Include Thea Ed:Thea Educ Intensive-MA

Level Restriction: Include GR