adapting, evaluating, and using strategies and materials for teaching biological and physical sciences. Explores special needs of the learners and characteristics specific to the science discipline.

CHEM 425R
Chemistry for Teachers
1 to 5:1 to 5:0 to 10 **Su**
•Prerequisite(s): Departmental Approval
For licensed teachers or teachers seeking to recertify. An update course in chemistry and/or a basic chemistry course for the chemistry endorsement from the Utah State Office of Education. Teaches principles of chemistry and pedagogy of teaching chemistry for teachers in public or private schools. Emphasis will be placed on correlation with the Utah Core Curriculum, the National Science Education Standards, and the Benchmarks of Project 2061. Topics will vary.

CHEM 482R
Chemistry Internship
1 to 4:0:5 to 20 **Su, F, Sp**
•Prerequisite(s): CHEM 2320 and a minimum GPA of 3.0; and Departmental approval of the internship proposal.
Provides supervised, practical, and research experience for students preparing for careers in chemistry. May be repeated for a maximum of twelve credit hours as per school standards.

CHEM 491R
Advanced Topics in Inorganic Chemistry
3:3:0 **On Sufficient Demand**
•Prerequisite(s): CHEM 1220 and instructor's permission. CHEM 3100 or CHEM 3600 or BIOL 3600 recommended
Examines advanced and current topics of inorganic chemistry including bioinorganic chemistry, symmetry and molecular orbital theory, and the descriptive chemistry of main-group compounds. Varies from semester to semester. Offered on demand. May be repeated for a maximum of nine credits.

CHEM 495R
Advanced Topics in Organic Chemistry
3:3:0 **On Sufficient Demand**
•Prerequisite(s): CHEM 2310, CHEM 2320, Instructor approval
For students majoring in Chemistry. Varies from semester to semester. May be repeated for a maximum of nine credits. Topics include organic synthesis, reaction mechanisms, and identification of organic compounds.

CHEM 499R
Independent Study and Research
1 to 4:0:3 to 12 **Su, F, Sp**
•Prerequisite(s): Instructor approval
Uses independent study on selected topics and conducting experiments in the same topic. Provides guidance by a faculty member. May be taken for a maximum of four credits.

CHIN—Chinese

CHIN 1010 **LH**
Beginning Chinese I
5:5:1 **F**
Studies Mandarin. Emphasizes oral proficiency in pronunciation and basic conversation as well as traditional grammar concepts. First priority is receptive language learning, then verbally-expressive language learning. Reading and writing are studied in CHIN 1020.

CHIN 1020 **LH**
Beginning Chinese II
5:5:1 **Sp**
•Prerequisite(s): Students need equivalent knowledge of CHIN 1010
Continues the same mode of learning as CHIN 1010 with renewed emphasis on conversational skills. Introduces characters and elementary calligraphy, reading and writing.

CHIN 2000
Chinese Character Writing
2:2:0 **On Sufficient Demand**
•Prerequisite(s): Basic Chinese speaking ability
Prepares students who have oral fluency in Chinese to read and write Chinese (Kanji Characters). Develops skills in sentence and paragraph writing according to Chinese language norms and format.

CHIN 2010 **LH**
Intermediate Chinese I
5:5:1 **F**
•Prerequisite(s): Students need equivalent knowledge of CHIN 1020
Emphasizes increased communicative ability as well as grammatical accuracy; adds more complex, literary grammatical structures; focuses on reading of basic 600 characters and writing of basic 300 characters. Uses diglot weave (mixture of English and Chinese) and character-romanization mix to ease learning of characters.

CHIN 2020 **HH**
Intermediate Chinese II
3:3:0 **Sp**
•Prerequisite(s): Students need equivalent knowledge of CHIN 2010
Emphasizes increased communicative ability as well as grammatical accuracy; adds more complex, literary grammatical structures, as well as discussion of contemporary cultural and political themes. Includes reading of basic 1000 characters and writing of basic 450-600 characters. Uses diglot weave (mixture of English and Chinese) and character-romanization mix to ease learning of characters.

CJ—Criminal Justice

CJ 100R
Forensic Science Lecture Series
1:1:0 **Su, F, Sp**
Consists of lectures presented by guest speakers on current topics in forensic science. May apply a maximum of three credits toward graduation.

CJ 1010 **SS**
Introduction to Criminal Justice
3:3:0 **Su, F, Sp**
Presents the processes, institution, and administration of criminal justice in the United States. Examines the crime problem and criminal law. Discusses criminal law, law enforcement, criminal prosecution, criminal defense, bail, the jury system, and sentencing. Explores the correctional system; namely, probation, prisons, inmates' rights, and parole.

CJ 1300
Introduction to Corrections Process
3:3:0 **F**
•Prerequisite(s): CJ 1010 and ENGL 1010
Introduces the corrections system. Includes origin and evolution, philosophies of corrections, perspectives on sentencing, and alternatives to incarceration. Includes community corrections, probation and parole, offender rights and legal issues; adult, juvenile, and special needs offenders; corrections specialists, staff and administration as a profession and special challenges for the future.

CJ 1330
Criminal Law
3:3:0 **Su, F, Sp**
•Prerequisite(s): LEGL 1000 or CJ 1010
Provides an overview of criminal law and procedures. Covers history and terminology of the criminal justice system, the elements of specific offenses, and the role of the paralegal in the fact-gathering process.

CJ 1340
Criminal Investigations
3:3:0 **F, Sp**
•Prerequisite(s): CJ 1010 and ENGL 1010
Introduces criminal investigation including necessary functions of interviewing witnesses and suspects, preservation and collection of evidence, and crime scene processing including post-crime scene processing of evidence.

CJ 1350
Introduction to Forensic Science
3:3:0 **F, Sp**
•Prerequisite(s): CJ 1010
Studies the importance of proper identification, collection and preservation of physical evidence. Teaches laboratory techniques and services available to the law enforcement professional as they relate to physical evidence.