# Research-infused Curriculum Course Listing for BUILD Trainees

Trainees in the BUILD program are required to take research-infused courses during their participation in the program. Scholars are required to take at least two courses (one per academic year). Fellows are required to take at least one course. It is strongly recommended that trainees take the Scientific <u>Research Communication course</u>. Taking more courses than the minimum requirement is encouraged. When available, trainees are highly encouraged to take the research-infused courses that were developed by the BUILD program, including HDEV 303 (formerly RSCH 207) and ENGR 361. The current class schedule can be viewed from <u>http://www.csulb.edu/student-records/schedule-of-classes</u>. RSCH courses can be found under University Research.

Note: Student must check the pre-requisite requirements for the courses and consult the respective instructor/department if a permit is needed to add the class. Permission to add the class is at the discretion of the instructor/department.

# HDEV 303 - Interdisciplinary Approaches to Health Disparities (3 units)

Prerequisite: GE Foundation requirements

This course covers the definition, prevalence, risk and protective factors, and interventions for health disparities among diverse populations. Using problem-based approaches, students will learn about discipline-specific and interdisciplinary methods to address common biomedical issues in a culturally relevant way. This class was formerly offered as RSCH 207 - Interdisciplinary Approaches to Health Disparities.

Alternate Course: HSC 407: Health Equity and Health Disparities in the US

### **Research Methods**

These courses cover theoretical and practical aspects of conducting biomedical or behavioral/social sciences research including hypothesis formulation, conducting literature review, experimental design, assessment of error within empirical data, ethics of experimentation, and interpretation/presentations of the results.

ANTH 458: Ethnographic Methods COM 307: Measurement in Communication Research CRJU 320: Criminal Justice Research Methods HCA 465: Analysis and Evaluation of Health Care Services HDEV 320: Research Methods HSC 403: Community Health Statistics I/ST 311: Research Methods in International Studies KIN 483: Measurement and Evaluation in Kinesiology LING 301: Intro to Research Methods – Linguistics majors only MAE 300: Engineering Instrumentation and Measurement NRSG 450: Nursing Research NUTR 337: Introduction to Nutrition Research Methods **PSY 310: Intermediate Statistics** PSY 411: Statistical Design and Analysis of Experiments – Psychology Majors only PSY 412: Multivariate Statistical Analysis PSY 433: Research in Cognition and Learning PSY 451: Research in Social Psychology REC 341: Evaluation and Research in Leisure Services - Recreation & Leisure Studies majors only RSCH 496A: Advanced Biomedical Research Methods SOC 354: Qualitative Methods of Social Research SOC 355: Quantitative Methods of Social Research SW 465: Research Methods in Social Work – Social Work majors only

Additionally, CHHS students may take a graduate-level course on Research Methods in their major (listed under XXX-696 course number) with an approval of the major advisor/department.

#### ENGR 361 – Scientific Research Communication (3 units)

General Education: Upper Division Capstone Category F Writing Intensive

Prerequisites: Completion of the GE foundation, completion of one explorations course, score of 11 or higher on the GWAR Placement Examination or successfully completed the necessary portfolio course that is a prerequisite for a GWAR Writing Intensive Capstone.

Introduction to technical writing for students pursuing research careers. Accessing and using research literature. Writing technical and research reports for various purposes and audiences. Oral presentation of research and scientific information. Includes intensive writing.

Alternate Course: CHEM 361: Chemical Communications

### Redesigned Research-infused Courses (Available starting Fall 2020)

The following upper-division courses have been redesigned to exemplify the integration of disciplinespecific research in the course activities through the funding support from the BUILD Research Across the Curriculum: Course Redesign Program. Students may take any of the following courses. For courses with multiple sections, student must take the section with the listed instructors, who were the recipients of the Course Redesign awards:

College of Engineering MAE 409A: Finite Element Analysis I (Dr. Daniel Whisler) MAE 435: Computational Fluid Dynamics I (Dr. Eun Jung Chae) CHE 470: Chemical Engineering Design (Dr. Sara Moghtadernejad)
College of Health and Human Services HCA 450: Quality Assurance in Health Care (Dr. Sara Nourazari) HCA 465: Analysis and Evaluation (Dr. Yang Lu) NUTR 470: Applied Sports Nutrition (Dr. Michelle Barrack)
College of Liberal Arts PSY 379: Psychology of Stress (Dr. Guido Urizar)
College of Natural Sciences and Mathematics BIOL 370: General Genetics (Dr. Judy Brusslan) CHEM 373 Physical Chemistry Laboratory (Dr. Enrico Tapavizca) CHEM 420: Advanced Organic Chemistry Laboratory (Dr. Kensaku Nakayama)