Acceptable Courses for the CEIN/BS Program

<u>Please Note:</u> If the course is on this list, you do not need our prior approval. If there is an alternative course that you would like to take at a Connecticut college/university, please check to see if the course will transfer in as the UConn requirement. You can check this at http://www.transfer.uconn.edu/search.php. If the course is not on the transfer list, please check to see if description matches what is described. Then please send the title, number of credits, *and* course description to cein@uconn.edu.

State universities may require individuals to be matriculated in order to take courses at their university. Students must contact the college or university to inquire if they can take a course as a non-matriculated student.

This list is subject to change. Please check our website each semester for an updated list of acceptable courses.

Research Methods (3 credits)

You need to take one of the following research methods courses or an equivalent. This is what we require in a research methods class: evidence-based research, ethical aspects, research problems, hypotheses, literature reviews, research design, sampling plans, data collection, evaluating measurements/instruments, data quality, rigor/trustworthiness and integrity for both quantitative and qualitative research.

<u>University</u>	Course Number	<u>Course Title</u>
Central CT State University	SW 374	Introduction to Social Work Research
_	PSY 221	Research Methods in Psych I
	PSY 222	Research Methods in Psych II
Charter Oak State College	PSY 410	Research Methods for Behavioral Science
Connecticut College	PSY 202	Research Methods in Psychology
Eastern CT State University	SWK 330	Research for Social Work I
	PSY 247	Research Methods
	SOC 350	Methods of Social Research
Housatonic Community College	BIO E290 (online)	Research Methods for Health Sciences
Southern CT State University	PCH 340	Public Health Research
	PSY 393	Experimental Methods
Tunxis CC	DHY 273	Oral Health Management
University of Connecticut	AH 4239 & AH 4240W	Research Methods in Allied Health
		Writing for Allied Health Research
	AH 4241 & AH 4240W	Research Methods for the Health
		Professional
		Writing for Allied Health Research
	HDFS 2004	Research Methods in Human Development
		and FS
	HDFS 2004W	Research Methods in Human Development
		and FS
	NURS 3205	Nursing Research
	NURS 3205 – May Session	Nursing Research
	POLS 2072Q	Quantitative Analysis in Political Science
	SOCI 3201	Methods of Social Research
University of Hartford	RES 2072Q	Quantitative Analysis in Political Science
University of Phoenix	HCS 465 (online)	Health Care Research Utilization
	RES 320 (online)	Introduction to Research and Information
		Utilization
University of Utah	PSY 3010 (online)	Introduction to Research Methods in
		Psychology

Statistics (3 credits are required. Some courses are 4 credits)

You need to take one of the following statistics courses or an equivalent. This is the course description of STAT 1100Q at UConn, for example: Standard and nonparametric approaches to statistical analysis; exploratory data analysis, elementary probability, sampling distributions, estimation and hypothesis testing, one- and two-sample procedures, regression and correlation. Learning to do statistical analysis on a personal computer is an integral part of the course.

<u>University</u>	Course Number	<u>Course Title</u>
CT Community Colleges	MAT 167	Principles of Statistics
Eastern CT State University	MAT 216	Statistical Data Analysis
	PSY 227	Behavioral Science Statistics
	SOC 351	Statistics for Social Research
Mitchell College	MA 111	Intro to Statistics
Quinnipiac University	MA 206	Statistics for the Behavioral Sciences
	MA 275	Biostatistics
Strayer University	MAT 300 (online)	Descriptive Statistics
Southern CT State University	MAT 107	Statistics
Trinity College	PSYC 221	Research Design & Analysis
University of Connecticut	STAT 1100Q	Elem Concepts of Stats
	STAT 1000Q	Business Stats
University of Hartford	M 114	Everyday Statistics
University of Phoenix	MTH 233	Statistics

A & P I and A & P II (8 credits total with labs – labs can NOT be done online)

You need to take both Anatomy and Physiology I and II for a total of 8 credits. The lab portion cannot be online. If there are separate grades for the class and lab portion, you have to earn at least a "B" or better in both class and lab (the grades will not be averaged by the CEIN Admission Committee). The content has to be human anatomy and physiology, not animal anatomy and physiology.

<u>University</u>	Course Number	<u>Course Title</u>
CT Community Colleges	BIO 211 & 212	Anatomy and Physiology I & II
Eastern CT State University	BIO 348 & 350	Functional Human Anatomy, Human
		Physiology
Fitchburg State College	BIOL 1200 & 1300	Anatomy and Physiology I & II
Quinnipiac University	B 211/211L & 212/212L	Anatomy and Physiology I & II
University of Connecticut	PNB 2264 & 2265	Human Physiology and Anatomy I & II
	PNB 2274 & 2275	Advanced Human Physiology and
		Anatomy I & II
Western CT State University	BIO 105 & 106	Anatomy and Physiology I & II
University of St. Joseph	BIO 241 & 242	Anatomy and Physiology I & II

Genetics (3 – 4 credits. No lab required. This course must be taken within the last 5 years)

You need to take one of the following courses. You do not need to take a lab, but some courses do have a lab with the lecture content. This course can be taken online (even if it has a "lab" component). Here are a couple of examples of what type of courses to take: MCB 2400 at UConn: Principles of genetics as applied to humans. Focus on modern methods of molecular genetics. MCB 2410 at UConn: Principles of eukaryotic genetics. Grades of "B" or better will be accepted on higher level genetics courses, but the content focus has to be human genetics. If there are separate grades for the class and the lab, you have to achieve a "B" or better in the class grade. The lab grade will not be recorded by the CEIN Admissions Committee.

<u>University</u>	Course Number	<u>Course Title</u>
Albertus Magnus	BI310	Genetics
CT Community Colleges	BIO 260	Principles of Genetics
	BIO 262	Genetics
Connecticut College	Bio 208	Genetics
Eastern CT State University	BIO 304	Genetics and Society
Fairfield University	BI0261	Genetics
Fullerton College	BIO 109 (online)	Genetics & Biotech in Society
Niagara County Community	BIO 275 (online)	Intro Human Genetics
College		
UC Berkeley Extension	X143 (online)	Genetics
University of New Haven	BI 306	Genetics
University of Connecticut	MCB 2400	Heredity and Society
	MCB 2410	Human Genetics
University of Phoenix	BIO 410 (online)	Genetics
Western CT State University	BIO 312	Genetics

Microbiology (3 – 4 credits. No lab is required, but most courses do have a lab)

One of the following courses is required. This is what is required for the microbiology content (using MCB 2610 from UConn as an example): Biology of microorganisms, especially bacteria. Cellular structure, physiology, genetics, and interactions with higher forms of life. Laboratory familiarizes students with methodology of microbiology and aseptic techniques. Again no lab is required for the CEIN program, but most courses do have a lab within the course. If there are separate grades for the class and the lab, you have to achieve a "B" or better in the class grade. The lab grade will not be recorded by the CEIN Admissions Committee.

<u>University</u>	Course Number	<u>Course Title</u>
Albertus Magnus	BI 215/L	Microbiology
CT Community Colleges	BIO 235	Microbiology
Eastern CT State University	BIO 334	General Microbiology
Fitchburg State College	BIOL 2700	Surveys of Micro-Organisms
	BIOL 3900	General Microbiology
Quinnipiac University	BMS 213	Microbiology and Pathology
	BMS 370	General Microbiology
Southern CT State University	BIO 120	Microbiology

University of Connecticut	MCB 2610	Fundamentals of Microbiology
University of New England	DPPP-376 (online)	Microbiology
University of Phoenix	BIO 340 (online)	Microbiology
	SCI 250 (online)	Microbiology

Biology (3 - 4 credits. No lab is required, but many courses are linked with a lab)

Only one of the following courses is required. If you have not achieved a "B" or better in this first course listed on the below rows, a "B" or better in the second course listed on the row will be accepted. If there are separate grades for the class and the lab, you have to achieve a "B" or better in the class grade. The lab grade will not be recorded by the CEIN Admissions Committee. If a course is not on this list, the content needs to be the equivalent of BIOL 1107 at UConn: Designed to provide a foundation for more advanced courses in Biology and related sciences. Topics covered

-include molecular and cell biology. Animal anatomy and brysloiog	nolecular and cell biology, animal anatomy	ı and nhvsioloav
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<u>University</u>	Course Number	<u>Course Title</u>
Albertus Magnus	BI 111/L	General Biology I
	BI 216/L	Cell Biology
CT Community Colleges	BIO 121	General Biology I
Eastern CT State University	BIO 202	Human Biology
Ida College	BI107	Biology of Cell
Mitchell College	BIOL 105	Principles of Biology I
Quinnipiac University	BI/BIO 101	Principles of Biology I
University of Connecticut	BIOL 1107	Principles of Biology
University of Phoenix	BIO 240	General Biology.
Western CT State University	BIO 103	General Biology I

Chemistry (4 credits - Lab is required and can NOT be online)

Only one of the following courses is required. If you have not achieved a "B" or better in this first course listed on the below rows, a "B" or better in the second course listed on the row will be accepted. If there are separate grades for the class and lab portion, you have to earn at least a "B" or better in both class and lab (the grades will not be averaged by the CEIN Admission Committee). If a course is not on this list, the content needs to be the equivalent of CHEM 1122 or CHEM 1127 at UConn. CHEM 1122 - Brief but comprehensive survey of important chemical theories and applications of chemistry. Preparation for one-semester courses in organic chemistry and biochemistry. Atomic structures, chemical bonding, chemical reactions, stoichiometry, states of matter, and theories of solutions. CHEM 1127 - Designed to provide a foundation for more advanced courses in chemistry. Atomic theory; laws and theories concerning the physical and chemical behavior of gases, liquids, solids, and solutions. Properties of some of the more familiar elements and their compounds. Quantitative measurements illustrating the laws of chemical combination in the lab (or CHEM 2443 at UConn: Structure and reactions of the simpler classes of the compounds of carbon).

<u>University</u>	Course Number	<u>Course Title</u>
Albertus Magnus	CH 121/L	General Chemistry I
_	CH 122/L	General Chemistry II
	CH 324/L	Biochemistry
CT Community Colleges	CHEM 111	Concepts of Chemistry
	CHEM 121	General Chemistry I
	CHEM 122	General Chemistry II
Eastern CT State University	CHEM 210/212L	General Chemistry I with lab
	CHEM 211/213L	General Chemistry II with lab
Emmanuel College	CHEM 1101, 1102	Principles of Chemistry
Mitchell College	CHEM 110	The Chemistry of Everyday Life
	CHEM 111	General College Chemistry I
	CHEM 112	General College Chemistry II
Quinnipiac University	CH 101	Fundamentals of General, Organic and
		Biological Chemistry I
	CH 110	General Chemistry I
	CH 111	General Chemistry II
University of Connecticut	CHEM 112	Chemical Principles and Applications
	CHEM 1124Q	Fundamentals of General Chemistry I
	CHEM 1125Q	Fundamentals of General Chemistry II
	CHEM 1126Q	Fundamentals of General Chemistry III
	CHEM 1127Q	General Chemistry I
	CHEM 1128Q	General Chemistry II

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