

Chemistry and Physics Minors

Academic Planning Worksheet

2019-2020

Notes

- Minors typically consist of 5 courses (20 credits).
- Department of Chemistry and Physics minors include:
 - Chemistry
 - Physics
 - Sustainability
- Students in interdisciplinary majors constructed from offerings of two departments (Biochemistry and Environmental Science) may not obtain a minor in either department of Chem & Physics or Biology.
- No more than one course in the minor should be taken pass/fail.

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Minor in Chemistry

Please consult with the department chair to discuss course selection. Chemistry minors can be designed to meet the special interests of a variety of students.

Complete both of the following courses.

Course #	Course Title	Credits	Complete
CHEM	Introductory Chemistry: Inorganic or	4	
111/113/115	Principles of Chemistry or Intensive General Chemistry (all Fall, based on placement test)		
CHEM 112	Introduction to Chemistry: Organic	4	

Complete three additional CHEM courses at or above 200-level. At least one of these courses must be at the 300-level.

Course Selected	Credits	Complete
	4	
	4	
	4	

Chemistry Minor Elective Notes:

An environmental interest would be met by:

- CHEM 216
- CHEM 227/CHEM 327/HON 308
- CHEM 341

Mathematics majors could elect:

- CHEM 216
- CHEM 332/PHYS 332
- CHEM 343

Biologists could obtain a chemistry minor by electing:

- CHEM 216
- CHEM 224 and CHEM 225 (instead of CHEM 216)
- CHEM 345

2019-2020



Minor in Physics

Complete all three of the following courses.

Course #	Course Title	Credits	Complete
PHYS 112	Fundamentals of Physics I	4	
PHYS 113	Fundamentals of Physics II	4	
PHYS 231	Wave Phenomenon	2	
PHYS 232	Introduction to Modern Physics	2	

Complete 8 credits from the following list (at least one 300-level).

Course Selected	Credits	Complete

PHYS 233	The Physics of Medical Imaging (S21, S23)
PHYS 245	Biophysics (S22, S24)
PHYS 300	Mechanics (S22, S24)
PHYS 305	Electricity and Magnetism (S21, S24)
PHYS 331	Thermodynamics and Kinetics (Fall)
PHYS 332	Quantum Mechanics and Molecular Structure (S22, S23)
PHYS 333	Advanced Topics in Modern Physics (S21, S23)

Minor in Sustainability

Complete the following three courses. The Environmental Forum is a required two-credit course (taken twice) focusing on topics related to sustainability and the environment, encouraging an active dialog between students and invited expert speakers, and providing an integrative thread to the minor. In addition, this course has a service-learning component that connects sustainability to the community.

Course #	Course Title	Credits	Complete
ENVI 201	Environmental Forum (spring)	2	
ENVI 201 or CHEM 221	Environmental Forum (spring) or Cultural Ecology and Sustainability: Lessons from Iceland (spring 2019)	2	
PHIL 139	Environmental Ethics (spring)	4	

The selection of Sustainability elective courses should be undertaken in consultation with the student's major advisor or another faculty member with an interest in issues of sustainability. The courses should form a cohesive and thematic thread of courses that complement the major.

Scientific Issues Elective

Complete an elective from the list below.

Course Selected	Credits	Complete
	4	

BIOL 104	Introduction to Environmental Science
BIOL 243	Environmental Sustainability
BIOL 245	Ecology

2019-2020



CHEM 227 / HON 308 Sustainability, Energy, and Climate Change

Economic and Political Issues Elective

Complete an elective from the list below.

Course Selected	Credits	Complete
	4	

ECON 247	Environmental Economics
ECON 145	Economics of Natural Resource Use and Sustainability
POLS 217	American Public Policy
ECON 235 / HON 335	From Farm to Table – Political Economy of Food Systems (not open
•	to first year students)

Social Issues Elective

Complete an elective from the list below.

Course Selected	Credits	Complete
	4	

MGMT 229	People, Planet, Profit – Managing Corporate Responsibility (Part of LC – Open to sophomores)
HIST 205	Global Environmental History
MGMT 224	Socially Minded Leadership (Open to sophomores)
MGMT 348	The Sustainable Supply Chain (Open to juniors)
SOCI 220	Working for Social Justice
SOCI 222	Organizing for Social Justice
SOCI 321	Sociology of Food
SOCI 245	Global Health

Department Contacts

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