Chemistry Major:

Chemistry Major: 340 40 semester hours consisting of CHM 111, 112, 201, 202, 305, 307 (Junior Level Discipline Specific Communication Requirement), 311, 415, 417, 422 (Senior Capstone Experience), and 7 additional CHM credit hours at the 300 or 400 level. CHM 105 may not be used toward major hours. Allied Courses: 8 semester hours of PHY 101, 102; 6 semester hours of MTH 222, 223.

CHM-

415. (3 sem. hrs.). Study of principle types of biochemical compounds, nature of reactions taking place in plant and animal tissue and functions of enzymes, carbohydrates, lipids and nucleotides in the metabolic control of these processes. Three recitations per week. Must be taken with the CHM417 laboratory. (Fall of even-odd years). PREREQUISITES: C- or better in CHM 201 and CHM 202, or a minimum grade of B- in CHM 201; COREQUISITES: CHM417.

416. (3 sem. hrs.). Biochemistry with an emphasis on metabolism including the chemical reactions of glycolysis, the citric acid cycle, lipid and amino acid synthesis and degradation, and nucleic acid metabolism. Must be taken concurrently with the laboratory course CHM 418.

(Spring of even-odd years). PREREQUISITES CHM 415 and CHM 417. COREQUISITES CHM 418. **417.** (1 sem. hr.). This course will reinforce concepts learned in CHM415 and CHM416 by providing hands-on experience in biochemical techniques used in the laboratory setting. One 3-hour lab per week. Must be taken concurrently with the lecture course CHM 415. (Fall even-odd years). PREREQUISITES C- or better in CHM 201 and CHM 202, or a minimum grade of B- in CHM 201. COREQUISITES CHM415.

418. (1 sem. hrs). This course will build upon techniques learned in CHM417. Concepts learned in CHM415 and CHM416 will be reinforced through hands on experience in biochemical techniques. One three hour lab per week. Must be taken concurrently with CHM 416. PREREQUISITES CHM415 and CHM417. COREQUISITES CHM416.

School of Music

Performance: Piano or Organ

Additional courses to Theoretical Music: (2 hours) 291, 292, 391, or 392; 321A; 321B for Piano or 322 for Organ.

Physics Major:

Physics Major: 30 semester hours including PHY 101, 102, 216, 227, 228, 331, 332, 391 (Junior level discipline specific communication requirement), and 490 (Senior Capstone Experience).

Major Allied Courses: CHM 111, 112, MTH 222, 223, 302, 307, and 308. It is strongly suggested that students take a course in Computer Science at the 200 level or higher. Recommended Electives: CPS 201, CPS 202, and MTH 303.

Breadth of Academic Experience: Writing

ECO 352: International Economics

Breadth of Academic Experience: Reading

ECO 102- Survey of Economics

Breadth of Academic Experience: Global/Culture Experience

ECO 352: International Economics ENG 360: Studies in World Literature

Heidelberg University Credit Hour Policy

The United States Department of Education requires that each institution develop a written credit hour policy that conforms to the definition of a credit hour under 34 CFR 600.2. The Department of Education defines a credit hour as:

An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

- One hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time, or;
- 2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Application of Credit Hour Policy

This credit hour policy applies to all undergraduate and graduate courses that award academic credit, regardless of the mode of delivery including, but not limited to, online, hybrid, lecture, seminar, and laboratory, <u>except as noted in "Policy for Labs, Ensembles, and Applied Music Instruction"</u> below. Academic units are responsible for ensuring that credit hours are awarded only for work that meets the requirements of this policy.

At Heidelberg University a "course hour" is defined as 50 minutes. Thus, a 1-credit course includes a minimum of 50 minutes per week of classroom or direct instruction, plus a minimum of 100 minutes per week of out of class student work. Over a 14-week semester, the 1-hour course would have a baseline of 2100 minutes. This time may consist of course activities including, but not limited to:

- Face-to-face course meetings
- Research with faculty
- Practicum placements

• Synthesis, processing, and reflection time and activities (may be used for writing or production of creative work which may include activities such as journals, formal papers, blogs, art, music, etc.)

Courses that have differently structured classroom schedules, such as research seminars, independent studies, internships, studio work, or any other academic work leading to the awarding of credit hours must state clearly learning objectives, expected outcomes, and workload expectations that meet the standard above.

Credit Hour Policy for Labs, Ensembles, and Applied Music Instruction

Laboratory: Laboratory describes a class in which all students are practicing an application of a scientific or technical nature that has most commonly been delivered in an associated class. Content in the laboratory class is usually based on content from an associated course. All students in the laboratory are following a similar set of instructions. A minimum of 100 minutes of lab time per week constitutes one credit hour.

Musical Ensembles: Musical ensembles are classes or rehearsals in which all students are following a similar set of objectives or instructions. Content in musical ensembles is derived from the repertoire studied, as well as from in-class discussion and instruction. A minimum of 180 minutes of rehearsal time per week constitutes one credit hour.

Applied Music (individual lessons): 1 credit hour for applied music consists of a minimum of 30 minutes face-to-face instruction time per week, plus a minimum of 240 minutes student practice time per week.