A/Y 16-17 EPS Curricular Advising Cheat Sheet
Questions? Ask Chenoweth (moffatt@eps.harvard.edu)

Requirements: 14 half courses; 11 half courses for joint; 5 courses for secondary; attend 5 dept tutorials

Students entering the concentration prior to 16-17 complete previous requirements. Students entering the concentration in 16-17 follow the new requirements (bullet points 1 & 2)

✓ A total of six EPS courses with at least one course at the 50- or 100-level sampling all three sub-disciplines: Oceans & Atmosphere(s); Earth History & Geobiology; and Geology, Geophysics & Planetary Science.

✓ Of this six, a minimum of two foundational courses from either EPS 10—new course—or SPU 12, 14, 25, 29, 30, and 31, and all 50-level EPS courses. No more than one of these from EPS 10 or SPU 12, 14, 25, 29, 30 or 31. (ordinarily no later than the first semester of the junior year).

✓ Four additional half-courses in EPS, at least three of which must be numbered 99 or above. Examples: Acceptable: EPS 52, 99, 109, 161; Unacceptable: EPS 56, 74, 99, 109—instead either 56 or 74 would have to be moved to "other related courses" where it would still count for concentration credit, just no longer in the "four courses" part.

✓ Physics (2-3 half courses):

Physics 12a & 12b or Physics 15a, 15b, & 15c or Physics 15a & 12b or Applied Physics 50a & 50b. Physical Sciences 2 & 3 allowable by petition. NB: Strongly encourage students who take the physics 15 series to complete all three courses.

✓ Chemistry (1-2 half-courses):

1 course option: Chemistry 17 or higher; or EPS-ES 133 or EPS-ES 135 or ES 164.
2 course option: Physical Sciences 10 and 11; or Phy Sci 1, 10, or 11 followed by EPS-ES 133, EPS-ES 135, or ES 164;
2 course option by petition: Physical Sciences 1 followed by Physical Sciences 10

NB: Physical Sciences 1 and Physical Sciences 11 cannot both be taken for credit.

✓ Math through or above Applied Math 21a and 21b or Math 21a and 21b (2 half-courses).

✓ All must be taken for a grade, and C-minus is normally the minimum acceptable result.

Thematic Plan of Study: Students must discuss and develop individual plans of study together with their concentration adviser. This ensures that the upper-level courses in EPS and related fields provide a coherent focus. The following lists may help focus these discussions, but students should have the option to suggest and develop their own themes outside these boundaries:

• Focus on Energy and Climate: EPS 109, 112, 131, 132, 134, 135, 162.
• Focus on Geobiology: EPS 56, 74, 107, 181, 182, 186, 187, 189.
• Focus on Geochemistry: EPS 51, 112, 133, 135, 141, 145, 146, 150, 186, 187, 189.
• Focus on Geology: EPS 51, 56, 74, 112, 145, 146, 150, 152, 161, 171, 181, 182, 189.
• Focus on Solid Earth Geophysics: EPS 146, 152, 162, 166, AM 104, AM 105.
• For preparation for advanced work in any sub-discipline: EPS 100, 112, or AM 111, AM 115; or CS 50.

Advanced Placement May allow students to complete higher-level courses, but a minimum of two physics, one chemistry, and two mathematics half-courses must be completed to satisfy concentration requirements.

Department Tutorial: EPS hosts six department tutorials each year during which EPS faculty speak informally about their research. EPS concentrators are required to attend a minimum of five tutorials prior to graduation. Tutorials dates for 16-17 5:00 pm, Faculty Lounge: October 5, November 2, December 7, February 1, March 1, and April 5.

Senior Thesis: Optional, but required for departmental (English) honors. Students interested in doing a thesis should begin discussions with potential thesis advisors no later than the end of their junior year. (The summer prior to their senior year is usually spent conducting thesis research.) Students must complete at least one term of EPS 99r which must be taken for a letter grade. An oral presentation of the thesis is required.
# Courses Required for Admission to Most Medical Schools

- General or inorganic chemistry with lab (one year)
- Organic chemistry with lab (one year)
- General physics with lab (one year)
- Biology with lab (one year)
- English (one year)

Taken from: http://ocs.fas.harvard.edu/premed-academic-requirements

## Harvard Courses That Satisfy Most Medical School Admissions Requirements

### General or Inorganic Chemistry with Lab (One Year):

**Two** of the following courses. Preferably both should contain labs.
- Life Sciences 1a OR Life & Physical Sciences A OR Life Sciences 50a
- Physical Sciences 1 or Physical Sciences 11 **EPS credit**
- Advanced inorganic, or physical chemistry. For example, Physical Sciences 10, Chemistry 40, Chemistry 60, or Chemistry 160 **EPS credit**

### Organic Chemistry with Lab (One Year):

- Chemistry 17 and 27 OR Chemistry 20 and 30 OR ChemS 17 and Chem 27 OR Chem S-20ab (Harvard Summer School) **EPS credit**

### Biology with Lab (One Year):

**Two** of the following courses. Preferably both should contain labs. Most medical schools recommend that these courses cover the cellular and molecular aspects as well as the structure and function of living organisms.
- Life Sciences 1b • Life Sciences 2 • Life Sciences 50a/b • MCB 60 • MCB 68 • OEB 10 • HEB 1420 • SCR 20 • Advanced courses

### Biochemistry (One Semester):

**Case by case for EPS credit**

Options for students who need to meet a biochemistry requirement include the following:
- Most medical schools who require biochemistry will accept a combination of Chem 17 and Chem 27 (EPS credit) as fully meeting both the organic and biochemistry requirements OR MCB 63 OR MCB 65 OR BCMP 234 OR OR SCR 25 OR BIOS S-10 (Harvard Summer School) OR Enroll in a biochemistry course the summer before starting medical school.

### Physics with Lab (One Year):

- Physical Sciences 2 and Physical Sciences 3 OR Physical Sciences 12a and Physical Sciences 12b OR Physics 15a and Physics 15b OR Applied Physics 50a and Applied Physics 50b **EPS credit** OR Phys-S1a & 1b (Harvard Summer School) OR Any two physics courses, one with a lab.

*by petition

### Mathematics (One Semester of Calculus and One Semester of Statistics)

- Math Ma and Math Mb OR Math 1a or Math 1b OR Math 19a OR Math 18 OR Math21a or 21b OR **Applied Math 21a or 21b EPS credit** OR Life Sciences 50b OR Any more advanced Math or Applied Math course PLUS Any statistics course (e.g. Stats Dept courses or Psychology 1900 or OEB 153 or Math 19b).

### English (One Year):

- One semester of the English requirement is met with Expos. (Students who take two semesters of Expos have met the full requirement of two semesters of English. The second semester can be met with English or Literature courses or with many of the Aesthetic and Interpretive Understanding and Culture and Belief courses.)