

## FIRST YEAR

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### Experimental Study Group

The Experimental Study Group (ESG) (<http://esg.mit.edu>) is a close-knit academic program geared primarily toward motivated first-year undergraduate students who wish to take an active role in their MIT education. Each year 55 students, nine staff members, and approximately 40 upper-level teaching assistants (most of whom were in ESG as first years) participate in the program. Staff members are selected for their teaching ability and strong interest in community-based education and are drawn from the departments of Biology, Chemistry, Mathematics, Physics, and the School of Humanities, Arts, and Social Sciences.

In place of lectures and large classes, ESG students participate in small interactive classes (typically fewer than 12 students), discussion-based seminars, study groups, and tutorials. Almost all the core subjects in biology, chemistry, mathematics, and physics are offered through ESG, as well as HASS classes. Although ESG can be a full-time activity for first years, students may take one or two subjects and seminars outside of ESG.

ESG's small classes are structured to be active learning environments with plenty of opportunity for lively discussion, question-and-answer sessions, student presentations, and peer-led problem-solving sessions. ESG also promotes educational innovation by encouraging staff and students to design and teach experimental 3, 6, or 9-unit seminars that combine theory and practice. Past seminars include diverse offerings such as The Chemistry of Sports; Programming Physics: E&M with Python; Why Can't We Get Along; Poetry Beyond the Page; and Many Interesting Things.

ESG's centrally located facility is comprised of 14 rooms (including a central lounge and a kitchen) where classes are held and weekly activities are offered, such as luncheons and dinners, guest faculty speakers, and evening study sessions. Students and staff also plan regular outings for the first years, such as hiking trips, concerts, and visits to local museums and attractions.

For more information about ESG, contact Graham Gordon Ramsay ([ramsay@mit.edu](mailto:ramsay@mit.edu)), associate director, Room 24-610, 617-258-0481, or visit the ESG website (<http://esg.mit.edu>).