Undergraduate GSI (UGSI) Application
Due: Friday, April 8, 2016
(You must submit a copy of your UCB transcript - unofficial copy okay.)

UGSI applicants must have a minimum 3.1 or better in overall and Major GPAs. They must also have completed Physics 137A (Quantum Mechanics) and Physics 111A (Basic Semiconductor Circuits) with A- or better. The Physics Department anticipates appointments at 8 hours/week for UGSIs. 20 hours/week appointments will be considered under exceptional circumstances. Please note: ALL selected candidates will be interviewed by the Head Undergraduate Adviser.

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>S.I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Mobile Number</td>
<td>Campus Number</td>
</tr>
</tbody>
</table>

[ ] I will have work study funding. Amount: _______________________

[ ] I will be holding an additional appointment.

<table>
<thead>
<tr>
<th>Hiring Department</th>
<th>Appointment Title</th>
<th>% or hr/wk</th>
</tr>
</thead>
</table>

List physics courses in order of teaching preference. UGSIs applicants will only be considered for lower division physics courses (7A, 7B, 7C, 8A, 8B, C10 and 111A).
1. __________
2. __________
3. __________
4. __________
5. __________

Please see other side for a list of short course descriptions of physics lower division courses.

☐ I understand that I must be a registered student and be enrolled in 15.0 units.
☐ I understand that in addition to my course work I must enroll in Physics 375 (2.0 units) – Physics GSI Training and

Physics 301 (2.0 units) – Supervised Teaching. Physics 375 is only offered in fall semesters; plan accordingly.

☐ English is my native language. If it is not, you may be asked to take the SPEAK or OPT free tests of spoken English administered by the GSI Teaching and Resource Center.

Overall UCB GPA: ________ Major GPA: ________ Number of Incompletes: ________

Please list any prior UC Berkeley teaching experience (UGSI and / or Tutor):

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>DEPT &amp; CRS NUMBER</th>
<th>APPT TITLE</th>
<th>% OR HR/WK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Physics Department will email tentative UGSI appointment offers in mid-May. Should you decide to accept an appointment offer the department must request the L&S Dean’s permission to appoint an undergraduate student as a GSI. After we receive the L&S Dean’s permission we will proceed with the UGSI hiring process. You may have to complete employment forms.

All GSIs/UGSIs (new and returning) must attend all pertinent GSI/UGSI orientation and training sessions starting August 17, 2016. Please note that Physics GSIs/UGSIs will be selecting their discussion and laboratory sections at the Physics GSI Organizational Meetings on Monday, August 22, 2016 at 10 AM in 50 Birge.

Instruction begins Wednesday, August 24, 2016.

Please submit application to Physics Student Services (376 LeConte or physics-student-services@lists.berkeley.edu)

GSI APPLICATIONS DUE: FRIDAY, APRIL 8, 2016
Lower Division Courses Suitable for GSIs for Outside the Physics Department

7A. Physics for Scientist and Engineers. (4) Three hours of lecture and four hours of laboratory/workshop per week. Prerequisites: High School physics Math 1A or Math1AS; Math 1B or Math 1BS (may be taken concurrently). Mechanics and wave motion. (F SP) Staff

7B. Physics for Scientist and Engineers. (4) Three hours of lecture and four hours of laboratory/workshop per week. Prerequisites: 7A; Math 1A-1B Math 53 (may be taken concurrently). Heat electricity and magnetism. (F SP) Staff

7C. Physics for Scientist and Engineers. (4) Three hours of lecture, one hour of discussion and three hours of laboratory per week. Prerequisites: Prerequisites: 7A-7B; Math 1A-1B, Math 53-54 (Math 54 must be taken concurrently, if it has not been completed). Electromagnetic waves, physical optics, relativity and quantum physics. (F SP) Staff

8A. Introductory Physics. (4) Students with credit for 7A will not receive credit for 8A. Three hours of lecture and four hours of discussion/laboratory per week. Prerequisites: Mathematics 16A or equivalent or consent of instructor. Introduction to forces kinetics equilibria fluids waves and heat. This course presents concepts and methodologies for understanding physical phenomena and is particularly useful preparation for upper division study in biology and architecture. (F SP) Staff

8B. Introductory Physics. (4) Students with credit for 7B or 7C will not receive credit for Physics 8B. Three hours of lecture and four hours of discussion/laboratory section per week. Prerequisites: 8A or equivalent. Introduction to electricity magnetism electromagnetic waves optics and modern physics. The course presents concepts and methodologies for understanding physical phenomena and is particularly useful preparation for upper division study in biology and architecture. (F SP) Staff

C10. Descriptive Introduction to Physics. (3) Three hours of lecture and one hour of discussion per week. Prerequisites: Open to students with or without high school physics. The most interesting and important topics in physics stressing conceptual understanding rather than math with applications to current events. Topics covered may vary and may include energy and conservation radioactivity nuclear physics the Theory of Relativity lasers explosions earthquakes superconductors and quantum physics. (F SP) Staff

111A. Instrumentation Laboratory. (3) The instrumentation lab (formerly Basic Semiconductor Circuits) is an introductory course in basic design, analysis and modeling of circuits, and data analysis and control. Topics include but not limited to: linear circuits, semiconductor diodes, JFETS, Op-Amps, Labview programming, ADC and DAC converters, signal processing, and feedback control.