In addition to departmental requirements, candidates for graduate degrees must fulfill University requirements described in the “Graduate Education” section of the UCSB General Catalog.

The Department of Physics does not offer a terminal M.A. program. Admission is to the Ph.D. program only. Master's degrees may be awarded only in the case of students who leave the Ph.D. program or for continuing students who have advanced to candidacy and request the M.A. degree. A minimum of 36 units is required for the M.A., and a grade of B or better is required in at least 5 of the 7 core courses.

Time-to-Degree: 3 years to advance to candidacy and 6 years to complete the degree; for students with a previous M.A. degree the times are 2 years to advance and 5 years to graduate.

### Core Courses for the Ph.D.
First year students will be required to pass the following graduate physics courses with a grade of B or better. The departmental graduate advisor can exempt students from taking a required course, or may require other courses in addition to those listed here.

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE NAME</th>
<th>UNITS</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 205*</td>
<td>Classical Mechanics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 210A</td>
<td>Electromagnetic Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 210B</td>
<td>Electromagnetic Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 215A</td>
<td>Quantum Mechanics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 215B</td>
<td>Quantum Mechanics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 215C</td>
<td>Quantum Mechanics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 219</td>
<td>Statistical Mechanics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Physics 237 (Galactic Dynamics) with a grade of B or better may be substituted for Physics 205 provided the student has demonstrated competency in Lagrangian Mechanics to the Physics 205 instructor. If Physics 237 is used this way as a substitution, it cannot be used to satisfy the elective requirement.

### Additional Course Requirements
Theoretical physics students must complete a minimum of five advanced graduate courses, and experimental physics students must complete a minimum of three advanced graduate courses with a grade of B or better. For theoretical physics students, at least one of these courses must be in an area clearly distinct from the student's field of specialization — such a determination will be made by the graduate advisor.
ADVANCEMENT TO CANDIDACY EXAM

Students are required to pass an oral advancement to candidacy exam, to be taken during winter quarter of their third year. Students should be able to discuss the key questions that need to be addressed in their field and propose a possible line of research. To ensure that the student and the committee agree on what constitutes an acceptably broad definition of field, the student will submit a brief synopsis of his/her presentation at the time the exam is scheduled. The synopsis must be approved by both the chair of the committee and the wiseperson assigned to the exam.

Students will be evaluated on:

1. whether the presentation addresses the underlying physics issues of the field and shows a reasonable understanding of the important problems;
2. whether the student is able to respond adequately to questions from the committee. Students must do well in both areas in order to pass.

Exam passed on (date): ____________________

DISSERATION

The final period of graduate study is primarily directed toward individual research and the preparation of a research-based dissertation. Research, either experimental or theoretical, is conducted under the supervision of a faculty member, normally in an area related to his or her own field of specialization. Students must pass an oral dissertation defense to be awarded the Ph.D.

M.A. DEGREE REQUIREMENTS SATISFIED: ____________________________________________ QUARTER/YEAR

DEPT GRADUATE ADVISOR SIGNATURE: ____________________________________________

________________________________________

PRINT NAME

FOR GRADUATE DIVISION USE ONLY

Residence requirement—minimum 3 quarters
Required units completed = ______
Language requirement Satisfied (if required)
No grades of I, NR, or NG
3.0 or better GPA overall
B or better in all core courses (200-level—verify if departmental requirement)
Registered quarter of degree or Filing Fee LOA:

Master’s Form I / COI and committee entered
Master’s Thesis date received (signature page/e-filed and entered in SReg): __________
Master’s Thesis Submission Fee:
ProQuest ID __________________________ Permission Ltrs uploaded?

Master’s Degree Awarded (mm/dd/yy)