Marine, Earth, and Atmospheric Sciences (PhD)

Degree Requirements
Graduate programs are offered in Atmospheric Science, Earth Science, and Marine Science. Specific course requirements are determined by the advisory committee of each student.

Degrees earned will be distributed as: "Doctor of Philosophy in Marine, Earth, and Atmospheric Sciences" without track specifications.

Marine Science Track
Within marine sciences the subdisciplines include:

- Biological Oceanography
- Chemical Oceanography
- Geological Oceanography
- Physical Oceanography

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 540</td>
<td>Principles of Physical Oceanography</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>MEA 549</td>
<td>Principles of Biological Oceanography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEA 570</td>
<td>Geological Oceanography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEA 573</td>
<td>Principles of Chemical Oceanography</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seminar Course 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 801</td>
<td>Seminar</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Area of Focus Courses 1

Courses in the "Area of Focus" are determined in conjunction with the academic committee

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 801</td>
<td>Seminar</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 72

Earth Science Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
</table>

Seminar Course 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 801</td>
<td>Seminar</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Area of Focus Courses 71

"Courses Outside Area of Focus" are determined in conjunction with the academic committee

Total Hours 72

Atmospheric Science Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
</table>

Seminar Course 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 801</td>
<td>Seminar</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Area of Focus Courses 71

Courses in the "Area of Focus" are determined in conjunction with the academic committee

Total Hours 72

Faculty
Viney Pal Aneja
DellWayne R. Bohnenstiehl
David B. Eggleston
David Paul Genereux
Peter Jeurgen Harries
Ruoying He
David Kimmel
Gary M. Lackmann
Elana L. Leithold
Jay Frederick Levine
Jing-pu Liu
David A. McConnell
Nicholas Meskhidze
Helena Mitasova
Lewis Andrew Owen
Matthew David Parker
John Peters
Markus Dirk Jan Petters
Zhen Qu
Walter A. Robinson
William J. Showers

1 Marine science students are required to take core courses in all three subdisciplines other than their own; this requirement may be fulfilled at the M.S. level.
2 MEA 801 is required of all Ph.D. students no later than the fourth semester in residence.
Lian Xie
Sandra E. Yuter
Anantha Aiyyer
Paul Kevin Byrne
Christopher Lee Osburn
Astrid Schnetzer
Karl William Wegmann
Carli Arendt
Stuart Bishop
Magdalena Alyssa Ellis Curry
Catherine Van Wie Davis
Lily Hughes
Ethan Gordon Hyland
Sarah Larson
Ryan William Paerl
Andres Camilo Rey Sanchez
Alianna Soldati
Otis B. Brown
Curtis Congreve
Brian K. Eder
Elisabeth Streit Falk
Kenneth E. Kunkel
Roberto Javier Mera
Carrie J. Thomas
Joseph Brendan Zambon
Fredrick Semazzi
Charles Ernest Knowles
Satya Pal Singh Arya
Jerry M. Davis
David John DeMaster
Ronald Victor Fodor
John Crothers Fountain
James Patrick Hibbard
Thomas Sawyer Hopkins
Daniel Kamyszowski
Leonard J. Langfelder
Leonard J. Pietrafesa
Sethu Raman
Allen J. Riordan
Dale A Russell
Ping-Tung Shaw
Edward F. Stoddard
Charles W. Welby
Donna Lee Wolcott
Thomas G. Wolcott
William Howard Battye
Geoffrey Weszely Bell
Scott Anthony Braun
Michael Brennan
Subrahmanya Bulusu
Brian A. Colle
Jeffrey Cunningham
Johannes Michael Leopold Dahl
Kathie Dello
David R. Easterling
Scott Howard Ensign
Troy Gilmore
Peter Hamilton
Russel S. Harmon
Barron Halton Henderson
Nam-Young Kang
David E. Kingsmill
Branko Kosovic
Emlyn Howard Koster
Benjamin Kravitz
Nicole Deneault LaDue
Romuald Lipcius
Huiqing Liu
David Mechem
Siddhartha Mitra
Maria Janeth Molina
Andrew Newell
Lester Perry
Sharon Phillips
Brandon Puckett
S. Trivikrama Rao
Joseph Rudek
Blake Schaeffer
Jenni Stanley
Robert Christopher Tacker
Susan White
Shaocai Yu
Yang Zhang
Yin San Zhang