

OFFICE OF THE PRESIDENT

October 18, 2012

Dean Lisa J. Graumlich College of the Environment Box 355679

Dear Lisa:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the revised program requirements for the Bachelor of Science degree in Oceanography. A copy of the change is attached.

I am writing to inform you that the School of Oceanography is authorized to specify these requirements beginning spring quarter 2013.

The new requirements should be incorporated in printed statements and in individual department websites as soon as possible. The *General Catalog* website will be updated accordingly by the Registrar's Office.

Sincerely yours,

Michael K. Young

President

Enclosure

cc: Dr. Susan Hautala (with enclosure)

Ms. Michelle Townsend (with enclosure)

Mr. Robert Corbett (with enclosure)

Dr. Deborah H. Wiegand (with enclosure)

Ms. Virjean Edwards (with enclosure OCEAN-20120919)



UNIVERSITY OF WASHINGTON CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS



ACADEMIC PROGRAMS

1 COpy

After college/school/campus review, send a signed original and 8 copies to the Curriculum Office/FCAS, Box 355850.

New Programs	Leading to a Bach	eattle	this form: http://depts.washington		ons.pul
Changes to Existing Programs New Admission Requirements for the Major in within the Bachelor of Revised Admission Requirements for the Major in within the Bachelor of Revised Program Requirements for the Major in Oceanography within the Bachelor of Science Revised Requirements for the Option in within the major in within the major in within the major in Revised Requirements for the Minor in Winter Septing Summer Year: 20 13 Change name of program from New or Revised Continuation Policy for Eliminate program in Proposed Effective Date: Quarter: Autumn Winter Septing Summer Year: 20 13 Contact Person: Susan Hautala Phone: 30596 Email: hautala@uw.edu Box:357940 EXPLANATION OF AND RATIONALEFOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, leiters of support and departmental handouls. (Josa additional pages if necessary). Senior thesis sequence was formerly ocean 443 (3, Win) and Ocean 444 (5, Spr) senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, ocean 445 and occurs in Spring. A new course, Ocean 444, ocean 445 and include other research types (e.g. laboratory, computer thesis requirements and include other research types (e.g. laboratory, computer thesis requirements and include other research types (e.g. laboratory, computer thesis requirements and include other research types (e.g. laboratory, computer thesis requirements and an individual science mentor. Program senior Ocean 444 (2), Ocean 445 (3). IERDEPARTMENTS AFFECTED List all departments funities or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit. Chair/Program Director.			Department/Unit Oc	eanography	Date 9/19/1
Changes to Existing Programs New Admission Requirements for the Major in within the Bachelor of within the Bachelor of Revised Admission Requirements for the Major in within the Bachelor of Within the Bachelor of Revised Program Requirements for the Major in Oceanography within the Bachelor of Revised Requirements for the Option in within the major in within the major in Revised Requirements for the Minor in Within the major in within the major in Revised Requirements for the Minor in Within the major in Within the major in Revised Requirements for the Minor in Within the major in New or Revised Continuation Policy for Eliminate program in Proposed Effective Date: Quarter: Autumn Winter Spring Summer Year: 20 13 Autumn Series Susan Hautala Phone: 30596 Email: hautala@uw.edu Box: 357940 ***EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, leiters of support and departmental handouts. (Jose additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr. and is being extended in time. Ocean 443 (proposal) occurs Autumn of to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that was part of the 5 credits of the Spring course), to allow multiple modelling) conducted with an individual science mentor. Program senior Chean 444 (2), Ocean 445 (3). **ERDEPARTMENTS AFFECTED** List all departments/units or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit. Chair/Program Director. Chair/Program Director. Chair/Program Director.	☐ Leading to a Bach	elor of	in		
Changes to Existing Programs New Admission Requirements for the Major in within the Bachelor of Revised Admission Requirements for the Major in within the Bachelor of Revised Requirements for the Major in Oceanography within the Bachelor of Revised Requirements for the Option in within the major in Revised Requirements for the Option in within the major in Revised Requirements for the Minor in Changes Change name of program from New or Revised Continuation Policy for Eliminate program New or Revised Continuation Policy for Eliminate program Proposed Effective Date: Quarter: Autumn Winter Spring Summer Year: 20 13 Contact Person: Susan Hautala Phone: 30596 Email: hautala@uw.edu Box:357940 SEPTAMATION OF AND RATIONALE FOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of august and departmental handouts, (Use additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr. and is being extended in time. Ocean 443 (proposal) occurs Autumn of to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modelling) conducted with an individual science mentor. Program senior chesis requirements/remain at 8 credits but are now Ocean 443 (3), ocean 444 (2), Ocean 445 (3). IERDEPARTMENTS AFFECTED List all departments/units or oc-accredited programs affected by your new program or changes to your existing program and acquire arment/Unit. Chair/Program Director.	Leading to a		degree with a m	ajor in	degi
New Admission Requirements for the Major in	Leading to a minor	in	Option within the existi	ng major in	
Revised Requirements for the Major in Oceanography within the Bachelor of Science Revised Requirements for the Option in within the major in Revised Requirements for the Minor in Revised Requirements for the Minor in Mayor Revised Continuation Policy for Eliminate program in Summer Year: 20 18 Change name of program from New or Revised Continuation Policy for Eliminate program in Summer Year: 20 18 Contact Person: Susan Hautala Phone: 30596 Email: hautala@uw.edu Box: 357940 Enterprise Program Program Proposed Enterprise Proposed Enterprise Include any relevant supporting documentation such as student learning outcomes, projected enrollments. Include any elevant supporting documentation such as student learning outcomes, projected enrollments. Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr.) Senior thesis sequence was formerly Ocean 443 (proposal) occurs Autumn of and is being extended in time. Ocean 443 (proposal) occurs Autumn of to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer thesis requirements. Program senior Director of each departments. Program senior Ocean 444 (2), Ocean 445 (3). IER DEPARTMENTS AFFECTED List all departments. Program and acquire arment/Unit: Chair/Program Director	New Admission Re	Ograms			
Revised Requirements for the Major in Oceanography within the Bachelor of Science Revised Requirements for the Option in within the major in Revised Requirements for the Minor in Revised Requirements for the Minor in Minor Changes Change name of program from New or Revised Continuation Policy for Eliminate program in Proposed Effective Date: Quarter: Autumn Winter Spring Summer Year: 20 13 Autumn Winter Spring Summer Year: 20 13 Su	Revised Admission	Requirements for the Major In		within the Bachelor	of
Revised Requirements for the Option in	Revised Program F	Requirements for the Majo	r in	within the Bachelo	r of
Other Changes Change name of program from	Revised Requireme	inte for the Out	n <u>Oceanography</u>	within the Bachelor	of Saion
Change name of program from New or Revised Continuation Policy for Eliminate program in New or Revised Continuation Policy for Eliminate program in New or Revised Continuation Policy for Eliminate program in New or Revised Continuation Policy for Eliminate program in New or Revised Continuation Policy for Suran Hautala Phone: 30596 Email: hautala@uw.edu Box:357940	Revised Requireme	This for the Option in	with	in the major in	or pereuce
Change name of program from	Other Changes	nts for the Minor in			
EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr and is being extended in time. Ocean 443 (proposal) occurs Autumn of senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements at 8 credits but are now Ocean 443 (3), Decan 444 (2), Ocean 445 (3). **IER DEPARTMENTS AFFECTED** List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit: Chair/Program Director: Chair/Program Director	Eliminate program in	ntinuation Policy for			
EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr and is being extended in time. Ocean 443 (proposal) occurs Autumn of senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements at 8 credits but are now Ocean 443 (3), Jean 444 (2), Ocean 445 (3). Jean 444 (2), Ocean 445 (3). Jean 444 (2), Ocean 445 (3). Chair/Program Director	Proposed Effective Date: Quart	er: Autumn Winter	XI ender III a		
EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr and is being extended in time. Ocean 443 (proposal) occurs Autumn of senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior chasis requirements at 8 credits but are now Ocean 443 (3), Jean 444 (2), Ocean 445 (3). Jean 444 (2), Ocean 445 (3). Jean 444 (2), Ocean 445 (3). Chair/Program Director	Contact Person: Sugan Haw	Uviintei	Spring Summer Year: 2	20 13	
rof new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr and is being extended in time. Ocean 443 (proposal) occurs Autumn of senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior chesis requirements remain at 8 credits but are now Ocean 443 (3), Jean 444 (2), Ocean 445 (3). JER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit: Chair/Program Director Chair/Program Director	EXPLANATION OF AND	Phone: 3	0596 Email: hautalas	1100	Т
letters of support and departmental handouts. (Use additional pages if necessary). Senior thesis sequence was formerly Ocean 443 (3, Win) and Ocean 444 (5, Spr and is being extended in time. Ocean 443 (proposal) occurs Autumn of senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that was part of the 5 credits of the Spring course), to allow multiple platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior Docean 444 (2), Ocean 445 (3). Docean 444 (2), Ocean 445 (3). Docean 444 (2), Ocean 445 (3). Chair/Program Director Chair/Program Director	For new program, please incl	VALE FOR PROPOSED CH	ANGE	aw.eau	Box: 357940
and is being extended in time. Ocean 443 (3, Win) and Ocean 444 (5, Spr) senior year. Formerly Ocean 444 (thesis and presentation) is renumbered to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that was part of the 5 credits of the Spring course), to allow multiple modeling) conducted with an individual science mentor, computer thesis requirements remain at 8 credits but are now Ocean 443 (3), Ocean 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director	letters of support and department	nental handouts (Lise addition	documentation such as student	learning outcome	
to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that was part of the 5 credits of the Spring course), to allow multiple platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements remain at 8 credits but are now Ocean 443 (3), Ocean 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director	Senior thesis segu	IANGO TENENTE	onal pages if necessary).	outcomes, pro	jected enrollments,
to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that was part of the 5 credits of the Spring course), to allow multiple platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements remain at 8 credits but are now Ocean 443 (3), Ocean 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director	and is being exter	ded was former	ly Ocean 443 (3, W	in) and Occ	
to Ocean 445 and occurs in Spring. A new course, Ocean 444, contains 2 credits of the research itself (formerly a single student cruise that was part of the 5 credits of the Spring course), to allow multiple platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirementsremain at 8 credits but are now Ocean 443 (3), Ocean 444 (2), Ocean 445 (3). **IER DEPARTMENTS AFFECTED** List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. **Date:** Date: **Chair/Program Director**	senior year Form	ided in time. O	cean 443 (proposal) occurs	1 444 (5, Spr
was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements remain at 8 credits but are now Ocean 443 (3), Discern 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit: Chair/Program Director: Chair/Program Director: Chair/Program Director					
was part of the research itself (formerly a single student cruise that platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements remain at 8 credits but are now Ocean 443 (3), Docean 444 (2), Ocean 445 (3). IER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit: Chair/Program Director: Chair/Program Director	and of	ccurs in Spring	· A new course	cation) is re	numbered
platforms and include other research types (e.g. laboratory, computer modeling) conducted with an individual science mentor. Program senior thesis requirements remain at 8 credits but are now Ocean 443 (3), Docean 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit: Chair/Program Director: Chair/Program Director Chair/Program Director	2 credits of the			~~~ 4 4 4	ambered
modeling) conducted with an individual science mentor. Program senior thesis requirements remain at 8 credits but are now Ocean 443 (3), Decan 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire artment/Unit: Chair/Program Director: Chair/Program Director Chair/Program Director		esearch itself			
thesis requirements remain at 8 credits but are now Ocean 443 (3), Cocean 444 (2), Ocean 445 (3). Cocean 445 (3). Cocean 446 (2), Ocean 445 (3). Cocean 447 (2), Ocean 445 (3). Cocean 448 (2), Ocean 445 (3). Cocean 448 (2), Ocean 445 (3). Cocean 449 (2), Ocean 445 (3), Cocean 449 (2), Ocean 445 (3). Cocean 449 (2), Ocean 445 (3), Cocean 449 (2), Cocean 4	was part of the 5	~ ~ ~ ~	(formerly a single	student con	tains
Docan 444 (2), Ocean 445 (3). HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Date:	was part of the 5 of platforms and incl.	credits of the s	(formerly a single Spring course), to	student crui	tains se that
HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director	was part of the 5 of platforms and inclumodeling) conductor	credits of the sale other resear	(formerly a single Spring course), to sch types (e.g. lar	student crui allow multip	tains se that le
HER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire sartment/Unit: Chair/Program Director: Chair/Program Director Chair/Program Director Chair/Program Director	was part of the 5 of platforms and inclumodeling) conductor	credits of the sale other resear	(formerly a single Spring course), to sch types (e.g. lar	student crui allow multip	tains se that le
the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director Chair/Program Director	was part of the 5 of platforms and inclumodeling) conductor	credits of the sale other resear	(formerly a single Spring course), to sch types (e.g. lar	student crui allow multip	tains se that le
the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director Chair/Program Director	was part of the 5 of platforms and inclumodeling) conductor	credits of the sale other resear	(formerly a single Spring course), to sch types (e.g. lar	student crui allow multip	tains se that le
the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions. Chair/Program Director: Chair/Program Director Chair/Program Director	was part of the 5 of platforms and inclumodeling) conductor	credits of the sale other resear	(formerly a single Spring course), to sch types (e.g. lar	student crui allow multip	tains se that le
artment/Unit: Chair/Program Director	was part of the forms and inclumodeling) conducted thesis requirements Ocean 444 (2), Ocean 444	credits of the saide other researed with an indivision of the said	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multip oratory, comp r. Program s cean 443 (3),	tains se that le puter senior
Date: Chair/Program Director	was part of the for platforms and inclumodeling) conducted thesis requirements Ocean 444 (2), Ocean 444 (1), Oc	credits of the sade other researd with an indivision of the same at 8 cress of the sade of	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multiporatory, comper. Program scean 443 (3),	tains se that le puter senior
Date: Chair/Program Director	was part of the for platforms and inclumodeling) conducted thesis requirements Ocean 444 (2), Ocean 444 (1), Oc	credits of the sade other researd with an indivision of the same at 8 cress of the sade of	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multiporatory, comper. Program scean 443 (3),	tains se that le puter senior
artment/Unit: Chair/Program Director	was part of the for platforms and inclumodeling) conducted thesis requirements Ocean 444 (2), Ocean 444 (1), Oc	credits of the sade other researd with an indivision of the same at 8 cress of the sade of	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multiporatory, comper. Program scean 443 (3),	tains se that le puter senior
Chair/Program Director	was part of the for platforms and inclumodeling) conducted thesis requirements Ocean 444 (2), Ocean 444 (1), Oc	credits of the sade other researd with an indivision of the same at 8 cress of the sade of	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multip coratory, comportatory, comporta	tains se that le puter senior ram and acquire instructions.
Date:	was part of the 5 of platforms and inclumodeling) conducted thesis requirements Ocean 444 (2), O	credits of the saide other researed with an indivision of the said with a said	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multip coratory, comportatory, comporta	tains se that le puter senior ram and acquire instructions.
	was part of the 5 of platforms and inclumodeling) conducted thesis requirements Ocean 444 (2), O	credits of the saide other researed with an indivision of the said with a said	(formerly a single Spring course), to ch types (e.g. labdual science mento dits but are now o	student crui allow multip coratory, comportatory, comporta	tains se that le puter senior ram and acquire instructions.

CATALOG COPY

Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.

Minimum 116 credits, to include the following:

- 1. Foundational Courses (55 credits): PHYS 121, PHYS 122, PHYS 123 (or PHYS 114, PHYS 115, PHYS 116); MATH 124, MATH 125, MATH 126 (or Q SCI 291, Q SCI 292, Q SCI 381); CHEM 142, CHEM 152 (or CHEM 144, CHEM 154); BIOL 180, BIOL 200; one of ESS 210, ESS 211, ESS 212; and BIOL 161-BIOL 162 or BIOL 180, BIOL 200, BIOL 220
- 2. OCEAN 200, OCEAN 201, OCEAN 210, OCEAN 220, OCEAN 400, OCEAN 410, OCEAN 420, OCEAN 430, OCEAN 443, OCEAN 444 (35 credits)
- 3. 400-level oceanography coursework selected in the student's area of specialization, in consultation with a faculty adviser (6 credits)
- 4. Upper-division science, mathematics, or engineering, selected in the student's area of specialization, in consultation with a faculty adviser (20 credits)
- 5. Minimum 2.0 grade in all required oceanography courses.

PROPOSED CATALOG COPY

Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications). Please note: all copy will be edited to reflect uniform style in the General Catalog.

Minimum 116 credits, to include the following:

- 1. Foundational Courses (55 credits): PHYS 121, PHYS 122, PHYS 123 (or PHYS 114, PHYS 115, PHYS 116); MATH 124, MATH 125, MATH 126 (or Q SCI 291, Q SCI 292, Q SCI 381); CHEM 142, CHEM 152 (or CHEM 144, CHEM 154); BIOL 180, BIOL 200; one of ESS 210, ESS 211, ESS 212; and BIOL 161-BIOL 162 or BIOL 180, BIOL 200, BIOL 220
- 2. OCEAN 200, OCEAN 201, OCEAN 210, OCEAN 220, OCEAN 400, OCEAN 410, OCEAN 420, OCEAN 430, OCEAN 443, OCEAN 444, OCEAN 445 (35 credits)
- 3. 400-level oceanography coursework selected in the student's area of specialization, in consultation with a faculty adviser (6 credits)
- 4. Upper-division science, mathematics, or engineering, selected in the student's area of specialization, in consultation with a faculty adviser (20 credits)
- 5. Minimum 2.0 grade in all required oceanography courses.

APPROVALS	Date:
Chair/Program Director:	9/17/12
College/School/Campus Curriculum Committee:	Date:
WO TO THE REAL PROPERTY OF THE PARTY OF THE	9/28/12
The state of the s	Date:
Dean/Vice Chancellor: Wein Gramm	9/28/2
Faculty Council or Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date:
Faculty Council on Academic Standards General Jacobs Organication	10/12/2013
POST TRI-CAMPUS APPROVAL (when needed)	
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date:

Proposed Changes to Oceanography Senior Capstone/Thesis Courses

In response to a detailed examination of the current senior capstone/thesis sequence that included student and instructor feedback, the undergraduate academic affairs committee recommended a revision that (1) extends the time-frame of the research experience from two quarters to three, and (2) broadens it to allow for thesis projects that are not primarily based on fieldwork. Examples of such areas include analysis of satellite data and other remotely acquired data sets, design and construction of instrumentation, computer or laboratory modeling of oceanographic processes.

The capstone sequence will now consist of the following courses and will remain at 8 credits total.

Autumn Qtr, OCEAN 443 Undergraduate Thesis: Proposal (3) NW

Case histories, presentations, and class exercises used to teach methods of formulating a research problem and proposal writing. Methods of data analysis, presentation, error estimation, library resource and data base use; web page implementation and design. Principles of experiment design and planning. Prerequisite: OCEAN 400; OCEAN 410; OCEAN 420; OCEAN 430.

Winter Qtr, OCEAN 444 Undergraduate Thesis: Research (2) NW

Work closely with faculty mentors to conduct thesis research as designed in Ocean 443 in a field, laboratory, or other guided research setting. Prerequisite: OCEAN 443. Offered: W.

Spring Qtr, OCEAN 445 Undergraduate Thesis: Analysis and Writing (3) NW

Analyze results from Ocean 444 and present results in a series of drafts and a final paper. Results are presented at a two-day-long public research symposium and on the students' individual Web sites. Prerequisite: OCEAN 444. Offered: Sp.