OCEAN SCIENCES | COMBINED HONOURS PRIMARY (A) SUBJECT

1. FOUNDATIONS	COURSE	TERM	COURSE	TERM
1A. Physics	O	/	O	/
1B. Calculus	O	/		/
1C. Stats	○ <u>MATH 1060</u>			
1D. Science Foundation 1			O	/
1E. Science Foundation 2	O		O	/
2. OCEAN CORE				
2A. Blue Planet	OCEA 2001		OCEA 2002	
2B. Tools & Concepts	OCEA 2020		OCEA 2021	
2C. Intro to Field Oceanography	OCEA 3003			
2D. Geological Oceanography	OCEA 4110	/		
2E. Physical Oceanography	O	/		
2F. Chemical Oceanography	O	/		
2G. Biological Oceanography	OCEA 4140	/		
3. OCEAN ELECTIVES				
3A. Choose four OCEA courses	O	/	O	/
	O	/		/
4. OCEAN CAPSTONE				
4A. Oceans and Global Change	OCEA 4000	/		
4B. Honours Research	OCEA 4201	/	OCEA 4202	/
5. CAS GENERAL REQUIREMENTS				
5A. Writing	O	/	O/	/
5B. Mathematics	O	/	O/	/
5C. Languages and Humanities	O	/	O/	/
5D. Social Sciences	O	/	O/	/
5E. Life and Physical Sciences	\bigcap	/		/

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To be eligible for Honours, a "B+" average (3.3) must be attained in the 2000, 3000, and 4000 level courses listed below.

1. FOUNDATIONS

- 1A. Either PHYC 1190 & PHYC 1290 Intro to Physics or PHYC 1310 & PHYC 1320 Physics In and Around You
- 1B. MATH 1000 & MATH 1010 Differential and Integral Calculus I & II (completion of MATH 1215 Life Science Calculus, with a grade of "B" or better, can be used in place of MATH 1000)
- 1C. MATH/STAT 1060 Intro to Statistics
- 1D. **One** of the following introductory course sequences:
 - BIOL 1010 & BIOL 1011 Principles of Biology I & II
 - CHEM 1011 & CHEM 1012 Concepts in Chemistry I & II
 - ERTH 1080 & ERTH 1090 Geology I & II
- 1E. Another **one** of the introductory course sequences listed in 1D

2. OCEAN CORE

- 2A. OCEA 2001 & OCEA 2002 Blue Planet I & II with a minimum grade of "B"
- 2B. OCEA 2020 & OCEA 2021 Tools & Concepts in Ocean Sciences I & II with a minimum grade of "B"
- 2C. OCEA 3003 Intro to Field Oceanography (summer term only; apply through SEASIDE)
- 2D. OCEA 4110 Geological Oceanography
- 2E. **Either** OCEA 3001 Intro to Physical Oceanography **or** OCEA 4120 Physical Oceanography
- 2F. **Either** OCEA 3002 Intro to Chemical Oceanography **or** OCEA 4130 Chemical Oceanography
- 2G. OCEA 4140 Biological Oceanography

3. OCEAN ELECTIVES

3A. Any four 3000 and 4000 level OCEA courses not used in 2C-G or 4A-B

4. OCEAN CAPSTONE

- 4A. OCEA 4000 Oceans and Global Change
- 4B. OCEA 4201 & OCEA 4202 Honours Research I & II

COLLEGE OF ARTS & SCIENCE (CAS) GENERAL REQUIREMENTS

- 5A. Any **two** approved writing courses. Consider:
 - OCEA 1001 & OCEA 1002 Conversations with Ocean Scientists I & II
- 5B. MATH courses taken in **1B** fulfill this requirement
- 5C. Many courses fulfill this **two** course requirement. Consider:
 - HIST 3073/OCEA 4331 History of Marine Sciences
 - PHIL 1050 Ethics in Science
 - *Courses chosen in 5C can't be used for 5D
- 5D. Many courses fulfill this **two** course requirement. Consider:
 - HIST 3073/OCEA 4331 History of Marine Sciences
 - *Courses chosen in 5D can't be used for 5C

Any two PHYS, BIOL, CHEM, ERTH, or OCEA courses fulfill this subject grouping requirement

