

News of the Marine Option Program

University of Hawaii at Manoa

Seawords

October 20, 1987

Vol. II No. 23

New certificate stresses academics

by Lani Teshima

The UHM Marine Option Program is now in charge of a new certificate program that allows undergraduate students to get further recognition for their efforts in a marine-related curriculum.

Entitled the Undergraduate Marine Certificate Program, it differs from the MOP certificate in its stress of academia, as opposed to the MOP certificate, which stresses hands-on experience.

The MOP certificate requires hours credit nine to 12 marine-related classes plus independent skill project (usually internship or research The new certificate project). the other hand. program, on requires anywhere from 15 to 30 credits, depending on concentration chosen.

"This new certificate is equivalent to a minor, but because UH officially does not offer minors, the program offers a certificate instead," said MOP Director Sherwood Maynard.

Although this certificate guarantee an undergraduate student automatic entrance Sherwood said graduate school, that the courses approved for this program will better prepare a student who is interested in some fields of graduate school.

Wall Cottook associated and the second associated assoc

Manoa Student Coordinator Lorena "Tap"
Wada holds a freshly printed MOP t-shirt
from a recent silkscreening workshop.
This new design was one of the styles
available. More photos on page 5.

-Photo by Lani Teshima.

See Page 2

New certificate

From Page 1

probably structure can courses for students in the ocean like zoology or geology, sciences, have enough students (background) in the basic sciences." Sherwood said. "Students will get the taste and flavor of what careers in marine might involve. sciences might find out (during the course getting this certificate) that they don't like it. This way. they won't go into graduate school and regret it later.

The certificate is also for those who may be interested in a career in the marine sciences. It is a way to get some of the knowledge without getting a graduate degree.

"Most students will never go to graduate school, and cutting them off (from getting an undergraduate marine sciences degree) is a lifetime termination for these people," said Sherwood.

According to Sherwood, there has been a call for an undergraduate Marine Sciences degree at the UH of years (there are a number for currently only 20 oruniversities around the country offer such undergraduate There was a review degrees). process to assess this situation, although undergraduate an degree was not created, the new certificate program was its direct result.

"It became obvious during a faculty review process that the UH needed a more meaty and visible organized undergraduate (marine) program--and all we had was MOP," said Sherwood, who was on the program planning committee.

"I like to think of this certificate as a consolation prize for (an undergraduate marine) degree," he said.

Because the program is in its first semester, Sherwood thinks some kinks may still need to be worked out. For example, of the three different disciplines that students can choose from, the



Biological and Behavioral Marine Sciences certificate requires up to 30 credits (although a student can take a minimum of 17). Since most undergraduate certificate programs require less than 30 credits, some students may be scared off at the sheer amount of credits needed.

Currently, the program is still specialized in limited fields, and the cross or inter-relational aspect is yet to be fully developed, according to Sherwood.

"The Humanities students have been left out, also," he said.

of the required steps in One obtaining this new certificate, is to acquire a faculty advisor. Sherwood said he has a pool of over 40 faculty members which a student can choose from. Those on the list are from all over the from campus, Oceanography Engineering to Political Science. of the benefits of having One one's own advisor, Sherwood said, to allow the undergraduate student to become acquainted with faculty members who, oftentimes, do not teach undergraduate courses and are thus generally cut off from interacting with undergraduates. This way, student desires to enter graduate school, he/she will already have established some contact those in the graduate departments.

Although the paperwork for the certificate will run through MOP, Sherwood plans to use MOP as a clearinghouse, or a reference point, with the emphasis on the contact between the student and the advisor.

There are three disciplines which the student may choose: Physical Marine Sciences (physics, chemistry, geology-geophysics), Biological and Behavioral Marine Sciences, and Marine Social Sciences (geography. policy. resources). Students are required take the courses that approved in those disciplines.

New certificate

A student is required to take courses in three different levels for a certificate in <u>Biological</u> and Behavioral Marine Sciences.

Level I consists primarily of zoology courses. In Level II, the student chooses one of five tracks (Marine Botany, Marine Mammals, Marine Invertebrate Zoology, Marine Fishes, and Aquaculture and Living Resources).

Level III consists of a directed reading or research course, which the faculty advisor helps with.

There are two categories from which a student can choose to get his/her Physical Marine Sciences certificate. Category M, which is directly marine-related, includes courses in Geology and Geophysics, Meteorology, Ocean Engineering and Oceanography.

Courses in Category B are not marine-related, necessarily but may be helpful in later studies. Courses include topics Chemistry. Civil Engineering. Mathematics, Mechanical Engineering, Meteorology and Physics. This certificate is designed for those interested in chemistry, ocean engineering, geology, meteorology or physics.

For those who are not interested in the "hard" sciences, there is the <u>Marine Social Sciences</u> certificate. A total of 15 credits is also required for this certificate.

There tracks are two students may choose from. One is Social/Cultural track, in Anthropology, Geography courses and Oceanography, and the second the Economic/Political track, with courses in Agriculture and Resource Economics, Geography, Political Oceanography, Science and Transportation. In addition, from both tracks must students complete one techniques course in either Economics or Geography (these courses are on Statistics, Remote Sensing and Marine



Cartography. Students working towards this certificate must also enroll in a directed reading course.

"The precedent has been set," he said. "With the establishment of this certificate, we now have a vehicle for marine certificates in other areas, and the addition of more tracks in the areas already set up."

He hopes this program would strengthen MOP as an established institution in the UH system, and that it will eventually lead to the creation of an undergraduate marine sciences degree.

Manoa is the only campus in the UH system with this new certificate, although Hilo MOP is currently considering developing a similar program.

Sherwood says an effort is being made to assess which courses in the community college system be counted for certificate, and he is also working on a plan to make the community college students of this program.

Although it will be a few years before we see our first graduates of the new Undergraduate Marine Certificate Program, Sherwood has already talked with over a dozen students who have shown interest in joining.

You must be currently enrolled Manoa as an undergraduate or unclassified graduate student, at least a sophomore with a minimum G.P.A. of 2.50, and have completed Oceanography 201 with a grade of A or B to qualify to enter this Also, being a MOP program. student does not prevent you from signing up for this program. If interested, visit the are you Marine Option Program office (MSB 229) and see Sherwood, or call him at 948-8433. **(2)**



Letters to MOP

As promised, B.J. Aune has sent MOP more postcards from his travels:

Dear MOP. 9/25/87 Aloha from the South Pacific. Zealand! Ι have extremely busy in meetings, which have gone marvelously well. The hospitality extended to me defies imagination. The weather. however, is cold! I mean COLD! I trust all is well. Take care. Aloha. B.J.

Dear MOP, 9/29/87 Aloha "down under" from Australia! I am now in Canberra which is the capital. remarkably similar to Washington This may be because an architect designed it. American is a five-hour train ride Canberra from Sydney on something called an express but it takes forever. New York subway goes faster. Aloha. B.J.

=Seawords=

1000 Pope Road Room 203 Honolulu, Hawaii 96822 Ph. 948-6000

James Gonser -Managing Editor
Lani Teshima - Assistant Editor
Sherwood Maynard - Director

Supported by the UH Sea Grant College Program, the State Ocean Resources Branch, the State Aquaculture Development Program and the UH. The opinions expressed herein are not necessarily those of the Marine Option Program or the University of Hawaii.

From alumna Shirly Chang we received this letter:

Dear Sherwood, 9/26/87

How are you? And how is MOP? Summer is over now and it's time to go back to school. How's school this term?

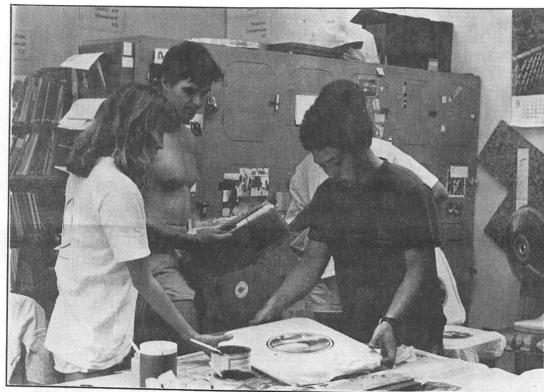
I'm still teaching English and working for Coca Cola Bottling Co. (in Taiwan). I'll be here for about another 2 - 3 years more. Then, I plan to go to Japan to live for a couple of years.

When will you be coming here? I've just come back from Hong Kong and Macao a few weeks ago. leave this country for a short trip every six months. In the next six months I'll be going to Thailand. Singapore, and Malysia. Asia can be a fascinating place to be in. There's so much to be "backward" learned from these countries.

The fall season is here now and the weather's been quite It seems like we're in for cold. cold winter this year. We've already had several typhoons this I've been trying to save month. newspaper clippings on anything regarding aquiculture, the sea. etc. for you. I hope you'll enjoy These clippings are about 2 -3 months old. I've tried getting materials on the techniques, developments, etc. on agriculture for you but, they're all in Chinese. I've seen things like a picture booklet different kinds of salt water but, they're in Chinese I don't know if you're ed. If you are, let me also. interested. know. Please keep in touch with what you're doing and what's MOP Take care and don't work doing. so hard. Hope to hear from you soon. Love, Shirley

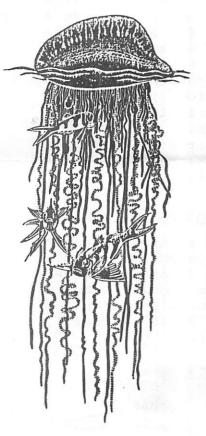


Silkscreening Workshop





MOP students (left to right)
Miki Grimes, Greg LeLesch
and Kent Takahashi were some
of the many MOPers who
were present at the workshop. Here, Grimes helps
Takahashi move a freshly
printed t-shirt.
LeLesh is holding the
screen that was used
for this design. The
workshop was held on
September 19 at the MOP
Student Study Center.
Photo by Lani Teshima.





Grimes uses a cotton swab to touch up the details on her t-shirt, which features the standard MOP logo.
-Photo by Lani Teshima.

Of Interest

BML CRUISES OFFERED

The Blue-Water Marine Laboratory (BML) will be offering half-day marine science cruises for high school students next Spring aboard the UH research vessel Kila.

The standard three-hour program includes practice with sampling and analysis of plankton, benthos, water quality and sediments. Navigation and seamanship is also covered.

BML suggests a ratio of 30 students to one teacher, although they can accommodate up to 35 persons.

The following are the tentative dates of the cruises:

Snug Harbor: March 14 to 18, April 21 to 22, April 25 to 29 Port Allen: March 28 to 31.

Kawaihae Harbor: April 11 to 15. Kahului Harbor: April 18 to 19.

The dates and times are tentative, and more information will become available, including the rates for the classes. The deadline for payment for the fall cruises have already passed.

The cruises are designed primarily for high school classes, but elementary, intermediate, college, or public groups may be taken on a space available basis.

If you are interested in taking a class aboard the R/V <u>Kila</u> with BML, call Elizabeth Kumabe, BML Program Coordinator at the Waikiki Aquarium, 923-9741.

SURF-SKI CLINIC

A surf-ski clinic will be held at the Ala Moana McCoy Pavilion a.m. to 3 p.m. on from 8:45 Sunday, November 15. You can bring your own surf-ski if you have one, but the clinic will have a couple for demonstration. There is a short lunch hour, so they recommend that you bring your own lunch. They also suggest bring note-taking materials. registration fee is \$5.

If you would like to sign up for this clinic, call Jan Auyong at Sea Grant Extension at 948-8191.

MTS Annual Milk Carton Boat Race

The Marine Technology Society's Annual Milk Carton Boat Race is back, and it will be held at Jackie Miller's Hawaii Kai home once again. The race will be held on Sunday, October 25, beginning at 2 p.m. If you think you have the winning milk carton (be it skim or whole), call 948-8863 for more information.

EDUCATIONAL BOAT TOURS

Grant Extension, Sea cooperation with Roberts Hawaii, is offering two educational tours from Honolulu Harbor aboard the glass-bottom boat Keana, Hawaii's school children grades One tour is of six through 12. Honolulu Harbor itself, and its related shoreline industries and activities. The second tour explores the shoreline underwater reefs from Honolulu Harbor to Waikiki.

Cruise times at 8 a.m., 9:30 a.m., and 11:30 p.m., seven days a week. The cost for each tour is \$3 per person, a special rate offered by Roberts Hawaii.

Sea Grant Extension has also produced information packets for the tours, to help teachers work with their students.

If you are interested in taking a cruise on the <u>Keana</u>, call Chris Woolaway at 948-8191.

NEEDED: EIGHT TO TEN OCTOPUS

A researcher is in need of eight to ten night octopus (Octopus ornatus) for morphological studies. If you would like to help collect them, please contact Bob Harman at 548-4371 (days), 528-4614 (evenings).



Of Interest

JOBS JOBS JOBS JOBS JOBS

There are three positions open at the Oceanic Institute at Makapuu Point.

One position is for a larval rearing technician, who will be assisting in larval rearing finfish. The primary marine in this full-time job involve culture of food organisms, including phytoplankton, rotifers copepods. The minimum qualifications include Bachelor's degree in Biology or closely related field, and the ability to perform some physical labor

The second is full-time a aquaculture technician to assist in the operation of experimental trials, growout feeding, water management, record keeping. management of Kahuku growout pond.

The minimum qualifications include an interest aquaculture, willingness to work, and ability maintain an to records. A B.S. and/or experience in aquaculture would desirable. This position will approximately two years, and salary will depend experience and qualifications.

The third position is for a permanent, full-time secretary (must be a non-smoker).

If you are interested in any of these positions, mail your resume to: Personnel, The Oceanic Institute, Makapuu Point, Waimanalo, HI 96795.

Dr. Gordon Grau would like to hire two students to assist with experiments, data workup, lab techniques and lab maintenance as student aquaculture assistants at HIMB-Coconut Island. The positions pay \$4.40 an hour, and is eight to ten hours a week. If you are interested, call Dr. Grau at 247-6631.

The Hawaii Institute ofGeophysics is looking а student engineer to help fabricate test and scientific equipment. install building and maintain equipment such as air conditioners. pumps, vacuum systems, There are occasional sea-going opportunities. a half-time position (20 hours a and pays \$3.80 an hour minimum, higher if experienced. If you are interested, call Marc Rosen at 948-8790.

The Pacific Beach Hotel Oceanarium is looking for part-time diver to assist with shows and maintenance. scuba certified and able to work flexible hours. The pay is \$5.30 an hour. They are also looking for full-time a. aquarium technician to troubleshoot both mechanical and fish-related problems. The pay is dependent on qualifications. If interested, call Larry Rostrata at 922-1233, and ask for the Curator.

The Pacific Congress on Marine Science and Technology (PACON) is looking to employ a person to identify a variety of potential funding sources to underwrite the organization's administration and The person will also be programs. responsible for assistance with proposal preparation. position will require 10 to 20 hours a week (hours very flexible) for three to six months, and will pay at least \$7 an hour, depending on qualifications. If you are interested, contact Sherwood at MSB 229, phone number 948-8433.

The state Division of Aquatic Resources has an opening for a student fisheries aide to work in their Honolulu office. and occasionally at Anuenue Fisheries Research Center. The position is part-time, and pays \$5.88 an Ιf interested, call Mike hour. Yamamoto at 548-5225.

Two Divers Needed

The Environmental Center and Sea Extension Service interested in two divers to help assess the effectiveness of an acoustic anti-fouling system as an alternative to toxic coatings. divers would be conducting transects. taking water samples, and organism samples from fouling plates. In addition to field work, they could assist with analysis of organism samples and The initial trial period will be 90 days, roughly November, December and January. Stipends will be approximately \$150 a month for about eight hours of work a Divers must also be UH week. If you are interested, certified. contact Sherwood at MSB 229, or call 948-8433.

ATTENTION: ARTISTS

MOP alumna Susan Scott, who is also the managing editor of Hawaii Ocean and Boating Sports Magazine, currently writing a book entitled Oceanwatcher: A Guide to Hawaii's Above-Water Marine Life. is in need of marine animal illustrations and photographs, including all animals visible from shore to boat (crabs, jellyfish, birds, turtles, dolphins, etc), and will need between 20 to This is an opportunity for a MOP skill project, and financial consideration will be negotiated. If you have a flair for art, call Susan at 947-1761.

VOLUNTEERS NEEDED

The World Aquaculture Society needs student volunteers for their "East Meets West" 19th annual conference and exposition, to be held January 4 to 9, 1988 in Honolulu.

Volunteers will be helping out during the technical sessions, running slide projectors, helping presentors, and other such general assistance. Volunteers will be given a free pass to all technical sessions. If you would like to be a part of this unique opportunity to participate in an international aquaculture conference, call Yara Lamadrid- Rose at 847-6015, or Pat Nevin at 948-8281/6696 as soon as possible.

SKILL PROJECT

Mark Suiso is looking for a student to assist with a baitfish project at the Hanohano aquaculture farm in Punaluu for one day a week. They will be using tanks and cages in the ponds. If you are interested, contact him via the Sea Grant Extension Service at 948-8191.

Nuuanu Catfish Fishing

The state Division of Aquatic Resources (DAR) will open Nuuanu Reservoir No. 4, to channel catfish fishing beginning November 14, for anglers with valid State of Hawaii FY 1987-1988 Freshwater Game Fishing License Entry Fishing Cards. Applications for Entry Fishing cards are available at DAR 1151 Punchbowl Street, Room 330, various license agents on Oahu.

For further information, call 548-4002.

VOLUNTEERS FOR AQUARIUM

The Waikiki Aquarium is looking for volunteers to serve as nature "interpreters" at the new "Edge of the Reef" exhibit. Volunteers are needed for two to three hour shifts, 9 a.m. to 5 p.m. daily. and holidays. weekends training course is free, includes an introduction life. Hawaiian reef The first session meets Tuesday, October 27 at 7 p.m. If you are interested, call the Aquarium at 923-9741.

STATE INTERN PROGRAM

The UHM College of Continuing Education and Community Service announced the opening for positions in the State Intern Programs. This includes the Legislative Intern Program and the Executive Intern Program.

You are eligible if you are a full-time UHM student with a or junior senior standing. Applications are available This recruitment Sakamaki D400. is open for the Spring 1988 semester, and the deadline for applications and transcripts October 30. For more information, call 948-6780.

CAREER AND COLLEGE FAIR

Of Interest

New Book on Hokule'a

An Ocean in Mind is the new book about Nainoa Thompson, and his voyage of the Hokule'a without the use of modern navigational aids.

The book is written by Will Kyselka, a retired associate professor from the UH Curriculum Research and Development Group, who is currently a lecturer at the Bishop Museum Planetarium.

If you are interested in purchasing this book, the University of Hawaii Press has made copies available at a special pre-publication 20% discount of only \$11.96 until October 31.

To purchase, send \$11.96 plus \$1 shipping to: University of Hawaii Press, 2840 Kolowalu Street, Honolulu, HI 96822.

Marine-Related Course Offered

Another course has been added to the ocean-related courses we published last issue: Interdisciplinary Studies IS 489. provides course opportunity for research internships with many environmentally related organizations and agencies. For information call Jackie Miller at The Environmental Center 948-7362.

Career The Annual College Fair will be held on 6 and 7 (Friday and November Saturday) from 9:30 a.m. to 4 p.m. at the Blaisdell Center Exhibition There will be over 170 Hall. representatives from colleges, professional universities, schools, technical industrial and trade schools, military services the financial academies, the visitor industry, and much, much more. This fair is not only for high schoolers--college students wanting to change schools or majors, or planning to enter graduate school, or even adults who are planning career changes or back to school (and don't to go forget parents!)

Best of all, the admission is free! This fair will also be at Wailuku on Tuesday, November 10, from 9:30 a.m. to 1 p.m. at the Maui War Memorial Center, and in Hilo on Thursday, November 12 from 9 a.m. to noon at the Edith Kanaka'ole Stadium.

MOP LIBRARY UPDATE

While Judy Roquet is reorganizing the MOP library at UHM, she asks that no one take out any books, but just to use them in the student study center. Also if you have any books out, please return them.

Electronic mail connects campuses

The Hawaii MOP campuses, separated by miles of ocean, have just become a little closer because we have now hooked into the Electronic Mail system.

By adding a special telephone line connected to the UHM computer center, messages can be easily sent back and forth simply by typing on your computer.

Sherwood says the important feature of the system is the savings in time. No longer will we have to wait for days to receive messages through the mail or wait until someone shows up for their office hours before they can on the telephone. reached Messages can be sent anytime, day To find out if any or night. waiting all each messages are campus has to do is check with their computer center to see if

anything is waiting for them.

Walt Dudley at UH Hilo already has a modem set up in his office so he can use the system right there.

MOP students that need to reach people on other campuses can learn this system and end some of the frustrating waits. Electronic Mail like other computer programs in that it has some key code words to talk to computer.

Sherwood is trying to make the system compatable with Multi Mate so entire documents can be sent by using a floppy disc.

Hopefully the Guam MOP will soon be hooked into the system soon.

A special mahalo to Bill King at the UHCC for his help in getting the system working.

The MOP Calendar

October

21 (W)-FIRST DAY OF "INTRODUCTION To Hawaiian Birds: " a course sponsored by the College of Continuing Education. Call 948-8400 for more info. 23 (F)-LAST DAY FOR RESTRICTED

withdrawals, UHM.
23 (F)-BROWN BAG LUNCH WITH MOP alumna Joanne Kushima Ho, to discuss careers at the DAR at 12:30 p.m. in MSB 203.

25 (Su)-UHM HOMECOMING. LOTS activities! Be there! Call LOTS OF 948-7235 for more information.

25 (S)-ANNUAL MILK CARTON BOAT Race, sponsored by the Marine Technology Society. See Of Interest.

26-30-UHM HOMECOMING WEEK. 27 (T)-VOLUNTEER TRAINING SESSION at Waikiki Aquarium. See Of Interest.

28 (W)-FISH I.D. CLASS BY KEITH Sakuma, 4:30 p.m. at UHM-MOP MSB 203. See Tap if interested.

29 (TH)-DEPARTURE OF R/V CROMWELL to Penguin Banks for Mahimahi research.

30 (F) JOSEPH CIOTTI, GUEST Speaker at WCC MOP, on Oceanography from Space, 3:30 p.m. Iolani 116. If you need or can offer a car pool, see Tap at MSB 203, or call 948-6000. Car pool from UHM-MOP at 2:30 p.m.

31 (SA)-HALLOWEEN! UHM-MOP PARTY at MSB 203. Begins at 5 p.m. 31 (SA)-UHM HOMECOMING PRE-GAME Activities at Castle Park, beginning 10 a.m. to midnight. 31 (SA)-UHM HOMECOMING GAME

against San Diego State University at the Aloha Stadium. Homecoming Pregame Program from 7 p.m.-7:30 p.m., game starts 7:30 p.m.

November

4-5 (W,TH)-FIRST AID COURSE BY Rich Neumann, Campus Center, room to be announced. 5 - 10

(M)-FIRST DAY OF MOP SCUBA Course for Openwater NAUI Certification. UH Pool, 6:30

p.m. to 9 p.m.
(F)-DEADLINE FOR APPLICATION TO take the Graduate Record Examination (GRE), to be administered on December 12.

6-7 (F,SA)-13TH ANNUAL CAREER & College Fair at the Neal Blaisdell Center. See Of Interest.

7-17-POSTMARK DATES FOR LATE registration for the GRE for Dec. 12 test.

10 (T)-13TH ANNUAL CARRER & College Fair at the Maui War Memorial Ctr. See Of Interest.
(W)-HOLIDAY: VETERAN'S DAY.

12 (TH) -- 13TH ANNUAL CAREER & College Fair at the Edith Kanaka'ole Stadium in Hilo. Of Interest.

13 (F)-CPR COURSE BY RICH NEUMANN. Campus Center, room to be announced. 5 p.m. to 10 p.m. 13 (F)-WCC MOP SEMINAR-TOM

Hourigan, topic tba. 3:30 p.m. at Iolani 116. 14 (SA)-NUUANU RESERVOIR #4 OPENS

to weekend catfish fishing. See Of Interest.

15 (S)-SURF-SKI CLINIC AT THE McCoy Pavilion. See Of Interest.

20 (F)-MOP-IN, SEMESTER-AT-SEA Program by UHM MOPer Mark Flanagan in MSB 203, 4 p.m. 21 (SA)-NUUANU YMCA 2K TURKEY Swim at Ala Moana Beach Park. Sponsored by the Nuuanu YMCA



22 (S)-THREE MILE SWIM IN Waikiki, sponsored by the Hawaii Swim Club Masters, 509 A Kunawai Lane, Hon, 96817.

22 (S)-THE WAIKIKI WATERMAN Aquathlon, sponsored by the United States Lifesaving Association, 638-8121.

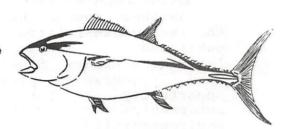
23 (M)-CPR CLASS BY RICH NEUMANN, Campus Center, room to be announced.

26 (TH)-THANKSGIVING: HOLIDAY. 27 (F)-NON-INSTRUCTIONAL DAY. 29 (S)-THE COORS LITE PRO/AM Triathlon at Kailua Beach Park. 800M swim, 14m bike and 4m run. Sponsored by Team Hawaii, 988-2673.

DECEMBER

18 (F)-MOP GRADUATION ON THE Falls of Clyde.

Denotes MOP activity.



University of Hawaii Marine Option Program 1000 Pope Rd. Rm. 229 Honolulu, HI 96822 Address Correction

Requested

George Balasz National Marine Fisheries Service 2570 Dole Street CAMPUS MAIL

NONPROFIT ORG. U.S. Postage PAID Honolulu, HI Permit No. 278

