



**Master of Pest Management Program  
and  
Master of Aquaculture Program**

**Summary of Graduate Curriculum Revisions**

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SGSC Reference: Meeting November 25, 1991

SCAP Reference: SCAP 91-55

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1. Option of part-time status for students in Master of Pest Management and Master of Aquaculture program
2. Calendar revisions to the Master of Pest Management program.

SGSC Reference: Mtg. of November 25, 1991

SCAP Reference: SCAP 91-54

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1. Deletion of BISC 400 as prerequisite for the Master of Aquaculture Program.

# SIMON FRASER UNIVERSITY

## MEMORANDUM

Dr. P. Percival	From..... Dr. M.L. Winston
Chemistry	Biological Sciences
MPM, M.Aq. Part-time Status	Date..... 28 February 1991
Subject..... MPM-Calendar Revisions	

The following two items were approved at the Departmental meeting of 27 February 1991. I would appreciate your bringing them forward to the Faculty Graduate Studies Committee for consideration.

1. The Department approved the option of part-time status for students in our Masters of Pest Management and Aquaculture programs. Both of these professional programs would benefit from allowing certain students to enroll part-time, as per Senate regulations 1.4.5. Enclosed is a memo from the Directors of those programs with additional rationale.
2. The Department also approved the attached calendar revisions for the Master of Pest Management program. Also enclosed is a letter from the Director, Dr. Mackauer, outlining these revisions.



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# SIMON FRASER UNIVERSITY

## MEMORANDUM

..... Dr. M. L. Winston.....	From .. M. Mackauer & L. A. Albright .....
..... Chair, DGSC.....	.....
Subject..... Part-time study.....	Date...5 February 1991.....

Senate Graduate Regulations (Section 1.4.5) permit students in specified graduate programs to complete their course requirements on a part-time basis.

This provision is of particular interest to students who are employed full- or part-time and hence are unable to carry a full course load.

As you will note from the Calendar, several Departments including Economics, Engineering Science and Natural Resource Management, permit graduate students in Ph.D. and Master's programs to enroll for part-time study.

We ask that Biological Sciences make graduate programs available to full- as well as to part-time students. While part-time students are counted as one-half of FTE students (and hence pay lower fees), they make few, if any, demands on financial support. In particular, graduate students in the Master of Aquaculture and the Master of Pest Management program would benefit from a decision to make these programs available on a part-time basis.

As this would only be an option, subject to approval by the student's supervisory committee and the Graduate Program Committee, the Department will retain control and can prevent abuses.

We ask that DGSC consider at an early meeting any changes that will be necessary in order to make M. Aq. and M.P.M. available to part-time students. We understand that a provision for part-time study is available already to students in the Post Baccalaureate Program in Environmental Toxicology.

L. J. Albright  
Acting Director, M.Aq.

M. Mackauer  
Director, M.P.M

cc: Dr. B. A. MacKeown, Chair

# SIMON FRASER UNIVERSITY

## MEMORANDUM

To.....	Dr. B. McKeown	From.....	M. Mackauer
.....	Chair, Biological Sciences	.....	Director, CPM
Subject.....	MPM Revision	Date.....	28 January 1991

I attach a copy of the revised MPM program. The revision includes several changes that, I hope, will clarify issues raised by the Departmental Review Committee and during subsequent discussions.

- (1) We have added an introduction which outlines general program requirements and average completion times.
- (2) The Program prerequisites have been reduced from 18 to a more realistic 12 credit hours in ecology, entomology, plant pathology, and chemical pesticides.
- (3) BISC 847 (Pest management in practice) has been made mandatory for all MPM students, in addition to the five 600-level courses.

BISC 847 will provide an overview and integrate diverse pest management tactics based on current examples. The course should be offered once a year, with several faculty participating in their areas of specialization.

- (4) The elective course requirements are reduced from previously 6 to now 4 (plus BISC 847) courses to bring them closer to general Faculty of Science requirements.
- (5) BISC 849 has been re-named as "M.P.M. thesis" rather than "MPM Professional Paper"; the course will not carry any credit hours. This change should reduce the confusion about what MPM students must do to satisfy degree requirements.

However, we feel very strongly that MPM students should retain the option of doing either library-, or laboratory-, or field-research. Although a majority of the students are doing laboratory/field research now, student interests and employment opportunities may change in the future.

- (6) We have indicated that the MPM program can be completed on a part-time basis.
- (7) We have removed a restriction on 600-level MPM courses, making these courses available for credit to other graduate students in the Department. Thus, a decision to enroll in one of these courses will now rest with the student and his/her Supervisor.

This change conforms with course availability in, e.g., environmental toxicology and aquaculture.

Overall, the proposed changes will bring the MPM program in line with current University regulations and Departmental practices. The basic program structure

remains unchanged. The MPM program enables students to obtain a broad training in diverse fields of pest biology and pest management, but it does not restrict participation in research. It is this duality (practicum courses and research) that makes the MPM program distinct from the M.Sc. program.

The revision was approved unanimously at the meeting of the CPM on 15 January 1991.



M. Mackauer

Encl.

cc: CPM Faculty

## MASTER OF PEST MANAGEMENT

The Master of Pest Management (M. P. M.) program is a professional degree program offered on a full- or part-time basis by the Department of Biological Sciences. Established in 1972, the program has graduated students from all over the world.

The M. P. M. program offers comprehensive instruction in theoretical and applied aspects of pest biology and management, combining graduate courses on campus with the demonstration of traditional and modern methods of pest assessment and control in the field. The program is not committed to any particular approach in pest control, although the need for environmental conservation is emphasized.

As part of the degree requirements, M. P. M. students must complete a thesis on a specific aspect of pest management. This thesis may be based on original field, laboratory or library research and must satisfy University regulations for a Master's degree.

The requirements for the M. P. M. degree can be completed in three semesters (1 year) of full-time study; however, most students will require four to six semesters. A minimum of one semester should normally be allowed for a research project based on library work, while field and laboratory research usually takes longer to complete.

## M. P. M. Program

### Admission Requirements

University admission requirements are given in the Calendar in the section on General Regulations (Graduate Programs). In addition, the program requires that, for clear admission, the applicant must have completed undergraduate level instruction equivalent to a total of 12 credit hours in ecology, entomology, plant pathology, and chemical pesticides. Applicants who lack some of the prerequisites may be admitted to the program but will be required to make up the deficiencies prior to graduation. Professional experience relevant to pest management can be considered in the case of applicants who do not meet formal admission standards. Normally, the M. P. M. admissions committee will specify the appropriate qualifying conditions, if any, at the time of admission.

### Degree Requirements

Every M. P. M. program will include the following:

1) Core courses (24 credit hours)

BISC 847-3 Pest Management in Practice

Professional courses. The five 600-level courses are normally taken as a block during the Summer semester of the first year:

BISC 601-5 Urban and industrial pest management  
 BISC 602-5 Forest pest management  
 BISC 603-5 Farm and specialty crop pest management  
 BISC 604-3 Orchard crop pest management  
 BISC 605-3 Management of animal disease vectors

2) Elective courses (12 credit hours)

M. P. M. candidates must complete a minimum of four elective 800-level graduate courses from the list given below. Course selection must be approved by the senior supervisor. Up to six credit hours of non-M. P. M. graduate courses may be substituted, subject to prior approval by the student's supervisory committee and the program director.

BISC 816-3 Biology and management of forest insects  
 BISC 817-3 Social insects  
 BISC 841-3 Plant disease development and control  
 BISC 842-3 Insect development and reproduction  
 BISC 843-3 Population processes  
 BISC 844-3 Biological controls  
 BISC 846-3 Insecticide chemistry and toxicology  
 BISC 848-3 Nematology  
 BISC 850-3 Weed biology and control

BISC 851-3 Vertebrate pests  
BISC 852-3 Medical and veterinary entomology  
BISC 884-3 Special topics in pest biology and management

3) BISC 849 M.P.M. thesis

The M.P.M. thesis is based on original library, laboratory or field research and must meet the standards specified in General Regulations (Graduate Studies).

4) Defense

An oral examination that includes the candidate's research as well as general aspects of pest biology and management.

# SIMON FRASER UNIVERSITY

## MEMORANDUM

Dr. M. L. Winston

Chair, Graduate Studies Committee

Subject: **MPM Program Revision**

From: Dr. M. Mackauer

Director, CPM

Date: 26 November 1991

Further to my memorandum of 28 January 1991 to Dr. B. McKeown, I am pleased to provide additional information that will explain the reasons for the proposed changes in the Master of Pest Management program. The numbers below refer to the numbered comments in the above-mentioned memorandum.

Several of the proposed changes were recommended by the External Department Review committee (#1, 5) or by Biology faculty (#7). The rationale here was to clarify the MPM degree requirements or to remove restrictions on course availability.

In addition, the proposed name change from "MPM Professional Paper" to "MPM Thesis" recognizes the fact that the "Professional Paper" is equivalent to the M.Sc. thesis, both in format and significance. The Department requires MPM students to defend their "Professional Paper" at a public defense under Senate Graduate Studies regulation 1.9.2. Thus, the MPM Professional Paper has in practice been considered equivalent to the M.Sc. thesis, although MPM students did have greater latitude in the selection of the thesis topic. The name change will reduce any confusion about the format and scope of the MPM thesis.

The proposed reduction from 18 to 15 credit hours in 800-level course requirements (Items 3, 4) is made to bring MPM course requirements more in line with the general course requirements for a Master's degree in the Faculty of Science, which are 12 semester hours of graduate course work in addition to an original thesis. As MPM students must complete the five Professional courses (BISC 601-605) with 21 credit hours, the total course requirements were unreasonable and perhaps out-of-line with the expectations for a Master's degree.

To ensure that all MPM students share, as far as possible, a common background, we propose to make BISC 847 (Pest Management in Practice) mandatory. The course will be redesigned to provide a general overview on current pest management theory and practice, as understood by SFU faculty.

Similarly, we propose to reduce MPM program prerequisites from 18 to 12 credit hours (Item 2). This change recognizes the fact that very few universities in North America offer undergraduate instruction in all the areas related to pest management, including parasitology, plant pathology and toxicology. In fact, our own Department recently deleted BISC 408 (Parasitic Associations) from the curriculum because of continued problems in offering the course on a regular basis.

Finally, we propose to offer the MPM program on a part-time basis (Item 6). This change makes use of an available option under University regulations. A significant and, perhaps, increasing number of MPM applicants have full-time employment, either with government agencies or colleges, but can obtain leave of absence to complete the degree requirements. The program gains from the

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admission of students with significant professional experience, experience that helps the typical University graduate to gain an understanding of real-life situations in pest management.

Please let me know if you, or the Senate Graduate Studies Committee, requires additional information.



M. Mackauer

MM/mn

To: M. Winston, Chair, DGSC  
From: L.J. Albright, A/Director, M.Aq. program  
Re: Removal of BiSc 400 as a requirement of entry into the M.Aq. program.  
Date: 28 March, 1991

In response to your memorandum of 22 March, 1991, I can provide you with the following information.

Drs. Albright, Druhl, McKeown, Fankboner, Devoretz, Schwindt, Hartwick and Lipovsky were present at the meeting of the M.Aq faculty which occurred on 12 February, 1991. At the meeting Dr. Fankboner moved that "BiSc 400 be removed from the prerequisites for the Master of Aquaculture Program". This motion was seconded by Dr. Hartwick and passed unanimously.

The feeling of all individuals at the meeting was that this prerequisite was unnecessary in view of the applied nature of the M.Aq. program.

Drs. Druhl and McKeown stated that at the time they drew up the proposal for the M.Aq. degree, they felt the M.Aq. students should have BiSc 400 as a prerequisite in view of the fact that it was a required course for graduation with a B.Sc. at this University. However, subsequent experience and thought indicated to them that its usefulness to the M.Aq. students was limited.

Accordingly, Based upon the above rationale and the motion passed by the M.Aq. faculty on 12 February, 1991, I am requesting that BiSc 400 be deleted as a prerequisite for entry into the M.Aq. program.

*L.J. Albright*

