

President  
Faculty Senate  
Campus

Resolution #13 1991-92

TO: President John E. Van de Wetering  
FROM: The Faculty Senate Meeting on 5/4-5/11/92  
(Date)  
RE: X I. Formal Resolution (Act of Determination)  
II. Recommendation (Urging the fitness of)  
III. Other (Notice, Request, Report, etc.)  
For your information  
SUBJECT: Change in Meteorology Major



Signed E. J. Vandreyer  
(For the Senate)

Date Sent 6-2-92

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TO: The Faculty Senate  
FROM: President John E. Van de Wetering  
RE: I. Decision and Action Taken on Formal Resolution  
a. Accepted. Effective Date June 92  
b. Deferred for discussion with the Faculty Senate  
on \_\_\_\_\_  
c. Unacceptable for the reasons contained in the  
attached explanation  
II, III.  
a. Received and acknowledged  
b. Comment:

DISTRIBUTION: All attached list.  
(Call Faculty Senate for  
full Resolution)

Distribution Date 6/10/92 Signed: [Signature]  
(President of the College)

# **BROCKPORT**

State University of New York  
College at Brockport  
Brockport, New York 14420

Department of The Earth Sciences  
(716) 395-2636

March 27, 1992

To: J. Emory Morris, Chairperson  
Undergraduate Curriculum Committee

From: Robert S. Weinbeck *RSW*  
Meteorology Advisor

John E. Hubbard, Chairperson *JEH*  
Department of The Earth Sciences

Re: Revision of Meteorology Major

We are requesting that the Faculty Senate, through the UGCC, approve the following revision to the Meteorology Major:

- 1) ESC 420 Atmospheric Sensing Methods (3 cr.) be required.

Rationale: National Weather Service guidelines for federal employment (the de facto specification for the meteorology major) will be updated in October, 1992 to require that all prospective employees have a course in remote sensing/instrumentation. This is a new title for the course "Meteorological Instruments" (with revision of content) which has existed since 1979 and been taken on an elective basis by most of the majors.

- 2) ESC 491 Seminar on Meteorological Problems (2 cr.)

Rationale: The Seminar course be increased from 1 to 2 credit hours to include a major senior thesis paper. Past practice has required only written map discussions and case studies. The enhanced paper will be a capstone experience, usually also presented for Scholar's Day or at appropriate professional meetings.

- 3) Meteorological electives be reduced from 7 credits to 6.

Rationale: The increase of the credit for Seminar and one more required course, partially offset by the minimal elective reduction, will make total credit hours in the major 36.

- 4) CHM 205 College Chemistry I be required.

Rationale: The new NWS guidelines require chemistry or physical hydrology. The hydrology option has always been available for students, the chemistry has been strongly recommended. Requiring chemistry will strengthen the major, provide better background for the air pollution course (an elective) and guarantee exposure to all of the physical sciences.

5) MTH 455 Differential Equations be the third math course required.

Rationale: NWS guidelines mandate this choice. We had offered the student the option of MTH 455 or MTH 203 Calculus III or PHS 301 Mathematical Methods of Physics. While all contain important material and will remain strongly recommended, especially for those students choosing to go on to graduate study, the choice of one clearly favors MTH 455.

The proposed program therefore would be as listed below:

| <u>Current Program</u>    |           | <u>Proposed Program</u>   |           |
|---------------------------|-----------|---------------------------|-----------|
| ESC 211 Weather           | 4         | ESC 211 Weather           | 4         |
| ESC 311 Synoptic Met.     | 4         | ESC 311 Synoptic Met.     | 4         |
| ESC 312 Weather Fcstg.    | 4         | ESC 312 Weather Fcstg.    | 4         |
| ESC 411/412 Hydrol./Lab.  |           | ESC 411/412 Hydrol./Lab.  |           |
| or                        | > 4       | or                        | > 4       |
| ESC 413/414 Climate/Lab./ |           | ESC 413/414 Climate/Lab./ |           |
| ESC 415 Physical Met.     | 3         | ESC 415 Physical Met.     | 3         |
| ESC 416 Thermo. & BDL     | 3         | ESC 416 Thermo. & BDL     | 3         |
| ESC 417 Dynamic Met.      | 3         | ESC 417 Dynamic Met.      | 3         |
| ESC 491 Seminar           | 1         | ESC 491 Seminar           | 2         |
|                           |           | ESC 420 Atm. Sens. Mtds.  | 3         |
| Met. electives            | 7         | Met. electives            | 6         |
|                           | <u>33</u> |                           | <u>36</u> |

Co-requisite courses

|                           |           |                          |           |
|---------------------------|-----------|--------------------------|-----------|
| MTH 201, 202 Calc. I, II  | 6         | MTH 201, 202 Calc. I, II | 6         |
| MTH 203 or 455 or PHS 301 | 3         | MTH 455 Diff. Eqns.      | 3         |
| PHS 201, 202 Phys. I, II  | 8         | PHS 201, 202 Phys. I, II | 8         |
|                           |           | CHM 205 Chem. I          | 4         |
|                           | <u>17</u> |                          | <u>21</u> |