Eastern Illinois University
New Course Proposal
ESC/GEG 3400, Broadcast Meteorology Practicum

Please check one: ☑ New course ☐ Revised course

PART I: CATALOG DESCRIPTION

1. Course prefix and number: ESC/GEG 3400
2. Title (may not exceed 30 characters, including spaces): Broadcast Meteorology Practicum
3. Long title, if any (may not exceed 100 characters, including spaces): Broadcast Meteorology Practicum
4. Class hours per week, lab hours per week, and credit [e.g., (3-0-3)]: 3-0-3
5. Term(s) to be offered: ☑ Fall ☐ Spring ☐ Summer ☐ On demand
6. Initial term of offering: ☑ Fall ☐ Spring ☐ Summer Year: 2010
7. Course description (not to exceed four lines):
   Study of forecasting techniques, synoptic meteorology, and using scientific methods in determining a meteorological forecast for the general public. Students will engage in preparing daily forecasts from meteorological models and then broadcast their results online. This course will enhance the students' future in broadcasting by merging science and communication. Students will have an opportunity to work with WEIU-TV.

8. Registration restrictions:
   a. Identify any equivalent courses (e.g., cross-listed course, non-honors version of an honors course).
   b. Prerequisite(s), including required test scores, courses, grades in courses, and technical skills. Indicate whether any prerequisite course(s) MAY be taken concurrently with the proposed/revised course. ESC 1400G (Weather & Climate)
   c. Who can waive the prerequisite(s)?
      ☐ No one ☐ Chair ☑ Instructor ☐ Advisor ☐ Other (Please specify)
   d. Co-requisites (course(s) which MUST be taken concurrently with this one):
   e. Repeat status:
      ☑ Course may not be repeated.
      ☐ Course may be repeated to a maximum of hours or times.
   f. Degree, college, major(s), level, or class to which registration in the course is restricted, if any:
   g. Degree, college, major(s), level, or class to be excluded from the course, if any:

9. Special course attributes [cultural diversity, general education (indicate component), honors, remedial, writing centered or writing intensive] None

10. Grading methods (check all that apply): ☑ Standard letter ☐ C/NC ☐ Audit ☐ ABC/NC
11. Instructional delivery method: ☑ lecture ☐ lab ☐ lecture/lab combined ☐ independent study/research
    ☐ internship ☐ performance ☑ practicum or clinical ☐ study abroad ☐ other
PART II: ASSURANCE OF STUDENT LEARNING

1. List the student learning objectives of this course:
   
   a. Increase students' knowledge of the day to day evolution of the atmosphere.
   b. Comprehend the importance of a broadcast meteorologist to the public
   c. Improve students' application and analysis of different meteorological model outputs and trends in the local climatological data.
   d. Improve students' analysis of severe weather events and how to communicate such situations to the general public.
   e. Enhance the students' synthesis of scientific data in a manner that summarizes their conclusions to the general public while maintaining a strict scientific code.

2. Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:

<table>
<thead>
<tr>
<th>Weekly Exercises</th>
<th>Review Prof. Bcst. Meteorologists</th>
<th>Daily Broadcasts</th>
<th>Self-evaluations</th>
<th>Midterm/Final Broadcasts</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>b</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>c</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>e</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

3. Explain how the instructor will determine students’ grades for the course:
   
   - Exercises and daily broadcasts = 40%
   - Reviews and self-evaluations = 10%
   - Midterm = 25%
   - Final = 25%

4. For technology-delivered and other nontraditional-delivered courses/sections, address the following:
   a. This course is not technology-delivered.

5. For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. These include:
   a. Graduate requirements are not applicable.

6. If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix *.)

PART III: OUTLINE OF THE COURSE

Week 1: Introduction, Background & the Philosophy of a Broadcast Meteorologist.
Week 2: Mesoscale Meteorological Analysis.
Week 3: Synoptic Meteorological Analysis.
Week 4: Jet Streak Circulations.
Week 5: Introduction to Meteorological Broadcasting Techniques (Begin 2 Minutes Broadcasts)
Week 6: Frontogenesis/Frontolysis Analysis and Interpretation (2 Minutes Broadcasts Cont.)
Week 7: Introduction to Isobaric Charts for Forecasting (2 Minutes Broadcasts Cont.)
Week 8: Midterm Broadcast (2 Minutes) and Midterm Examination
Week 9: Convective Weather Analysis (Begin 3 Minutes Broadcasts)
Week 10: Mesoscale Convective Systems Analysis (3 Minutes Broadcasts Cont.)
Week 11: Broadcasting Severe Weather Break-ins (Broadcast 1 Mock Severe Weather Break-ins, 3 Minute Broadcasts Cont.)
Week 12: Introduction to WEIU-TVs WSI System (Begin 4 Minutes Broadcasts)
Week 13: Developing Forecast Techniques using Multiple Models (4 Minutes Broadcasts Cont.)
Week 14: Mastering Forecasting Techniques through Forensics and Observations (Practice Delivering 4 Minutes Broadcasts at WEIU-TV using WSI System)
Week 15: Final Broadcasts Delivered at WEIU-TV Studio (4 minutes) and Mock Severe Weather Break-in Final
Week 16: Final Examination

PART IV: PURPOSE AND NEED

1. **Explain the department’s rationale for developing and proposing the course.**

The course has been designed to merge the scientific process with the principles of communication into one single track allowing the student to focus on his/her methods of forecasting and delivery. Unlike other programs, the purpose is to get the student daily practice in forecasting and broadcasting. Many students in this field do not have the experience when they graduate and look for a job. Since its conception in Fall 2006 as a Continuing Education course, several students have excelled in the field of broadcast meteorology. Currently, we have four students that recently acquired positions at WAND, WICD, WCIA, and four students working at WEIU. One particular student received a National Award for Weather Anchoring through the Broadcast Education Association twice. Chief meteorologists throughout the area have been inquiring whether we have students interested in doing part-time work in broadcast meteorology as they continue their studies. The reasons listed above are strong in advancing this course into permanency within our department. Again, the most important aspect of this course is that our students receive daily practice in both science and communication, which appeals to many professionals in this field seeking future employees. This course will be an additional requirement for the Broadcast Meteorology Minor.

2. **Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.**

The only prerequisites for this course is ESC 1400G (Weather & Climate). The course level reflects the expectation that students who take it have developed from General Education courses and previous work in their majors the critical skills, intellectual stamina and professionalism for the demanding nature of the concepts. The course level also justifies the personal motivation and initiative needed to compete in the Broadcast Meteorology industry.

3. **If the course is similar to an existing course or courses, justify its development and offering.**

   a. ESC/GEG 3400 is not similar to any other course.
PART V: IMPLEMENTATION

1. Faculty member(s) to whom the course may be assigned:
   Cameron Douglas Craig or qualified faculty in the Department of Geology/Geography

2. Additional costs to students:
   0.00

3. Text and supplementary materials to be used (Include publication dates):
   *designates a required textbook (Students should be able to purchase at full price for future reference); other works will be put on reserve.


PART VI: COMMUNITY COLLEGE TRANSFER

A community college course will not be judged equivalent to this course.

PART VII: APPROVALS

Date approved by the department or school: Nov 4, 2009

Date approved by the college curriculum committee: December 11, 2009

Date approved by the Honors Council *(if this is an honors course)*:

Date approved by CAA: January 21, 2010

*In writing-active courses*, frequent, brief writing activities and assignments are required. Such activities -- some of which are to be graded -- might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course content, secondarily to strengthen students' writing skills. In *writing-intensive courses*, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students’ writing should constitute no less than 35% of the final course grade. In *writing-centered courses* (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages,
from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).