

**WRITING ACROSS THE CURRICULUM
REQUEST FOR APPROVAL TO USE W-DESIGNATION**

LSC # 118
Action 11-5-92

TYPE I. PROFESSOR COMMITMENT

- (X) Professor Allan T. Andrew Phone 2750
(X) Writing Workshop? (If not at IUP, where? when?) _____
(X) Proposal for one W-course (see instructions below)
(X) Agree to forward syllabus for subsequently offered W-courses?

TYPE II. DEPARTMENTAL COURSES

- () Department Contact Person _____ Phone _____
() Course Number/Title _____
() Statement concerning departmental responsibility.
() Proposal for this W-course (see instructions below)

TYPE III. SPECIFIC COURSE AND SPECIFIC PROFESSOR(S)

- (X) Professor(s) Allan T. Andrew Phone 357-2750
(X) Course Number/Title BI 364 Immunology
(X) Proposal for this W-course (see instructions below)

SIGNATURES:

Professor(s) Allan T. Andrew
Department Chairperson [Signature]
College Dean William G. Cole
Director of Liberal Studies [Signature] 11-5-92

COMPONENTS OF A "WRITING SUMMARY"

- (I) "Writing Summary" — one or two pages explaining how writing is used in the course. First, explain distinctive characteristics of the content or students which would help the Liberal Studies Committee understand the summary. Second, list and explain the types of writing activities; be especially careful to explain (1) what each writing activity is expected to accomplish as well as the (2) amount of writing, (3) frequency and number of assignments, and (4) whether there are opportunities for revision. If the activity is to be graded, indicate (5) evaluation standards and (6) percentage contribution to the student's final grade.
- (II) A copy of the course syllabus.
- (III) Samples of assignment sheets, instructions, or criteria concerning writing that are given to students.

Provide 12 copies to the Liberal Studies Committee.

Use of Writing in BI 364-Immunology

BI 364-Immunology is proposed for identification as a "w" course. The course is taught every spring and can be taken by biology majors, biochemistry majors, and medical technology majors. The course will count towards a biology major or minor. It is a required course for medical technology majors. It is not listed as a Liberal Studies elective. Most students will be juniors or seniors. Class size will be limited to 32.

Three types of writing experiences will occur in this course.

1. Essay examinations(writing for evaluation). Three examinations will be given in the course including a comprehensive final. At least 50% of the examinations will require writing either as short answer essays or definitions and descriptions. The essay questions will be designed to make students integrate and synthesize material discussed in the class. Students are encouraged to write answers that are clear, concise and including all the items necessary for completeness. The students will be evaluated on the basis of the preceding criteria. 300 points: 69% of grade.
2. Research paper. Students will be required to write a research paper that relates to a current topic in immunology. By writing the paper, students will become involved in an active learning process, critical thinking, learning library skills and the development of writing skills. The first draft of the paper will not be graded and returned to the students for revision. The assignment be will checked at various times during the semester and graded according to the attached assignment sheet. 100 points: 24% of the grade.
3. Laboratory reports. During the course of the semester students will be required to turn in four laboratory reports. These reports will be written in the format outlined by The American Society for Microbiology for submission to their journals. The format will be discussed in the laboratory. This exercise will require students to think critically about the laboratory exercise and give them practice in presenting experimental results in a approved scientific format. The first two reports will be read but not graded. The final two reports will be graded. 30 points: 7% of grade.

Course Syllabus

I. Catalog Description

BI 364 Immunology (2c-3l-3sh)

The nature of immunity; physical and chemical properties of antigens and antibodies; nature of antigen-antibody interactions; tissues and cells of the immune system; immune responsiveness; immunity and disease. Laboratory employs serological and cellular techniques. Prerequisites BI361; CH231

II. Objectives

The goals of the course are:

1. To provide a basic understanding of immunology and its important role in the biomedical field.
2. To develop an understanding of the complexity of the human immune system.
3. To consider some of the bioethical problems associated with the various aspects of immunology. For example: organ transplants genetic engineered monoclonal antibodies; HIV infection and treatment.
4. To develop critical thinking skills.
5. To help students express in writing their thoughts and ideas with respect to objectives 1-4.

III. Course Outline

I. Introduction

II. Immunochemistry (5 lectures)

- A. Antigens and Haptens
- B. Immunoglobulins
- C. Complement

III. Cellular Immunology (8 lectures)

- A. Hemopoiesis
- B. Differentiation of Lymphocytes

- C. Structure of Lymphoid Tissue
- D. Major Histocompatibility Complex
- E. Cellular Interactions

- F. Receptors
- G. Selection and Activation of Lymphocytes

IV. Antigen-Antibody Interactions(3 lectures)

- A. Antibodies as Tools
- B. Antigen -Antibody complexes
- C. Measuring Immune Reactions

V. Immunity and Immunopathology(9 lectures)

- A. Immunity
- B. Hypersensitivity Reactions
- C. Immunodeficiency and Immunoproliferative Diseases
- D. Tumor Immunology
- E. Autoimmunity
- F. Transplantation Immunology

IV. Evaluation Methods.

The grade for this course will be determined as follows:

1. TESTS: Three tests 300 points, 69% . Two exams will be given during the semester. The third exam will be a comprehensive final given during final exam week. All exams will be given during class time.
2. RESEARCH PAPER: 100 points, 24%. Each student will write a paper on a subject which relates to a current topic in immunology. See assignment sheet.
3. LABORATORY REPORTS: 30 points, 7%. Each student will be required to turn in four laboratory reports during the semester. These reports will follow the format of The American Society for Microbiology. Two reports will be reviewed but not graded. The final two reports will be graded.

V. Required Reading: Kuby, Janis. 1992. Immunology. W. H. Freeman and Company
New York, New York

ASSIGNMENT WORKSHEET FOR RESEARCH PAPER

Assignment: you are required to write a research paper that relates to a current topic in immunology. Please follow the following guidelines.

1. between 15-20 pages
2. type written or done on a computer.
3. reference citations are to follow the **CBE Style Manual, 5th. ed.**
4. a title page and one page abstract are to be placed before the text of the paper.
5. after the third week of the semester, the student will discuss his/her topic with the instructor.
6. at mid-term, an outline of the paper along with the references found are due. These will be returned, with comments, in one week.
7. three weeks later a draft of the paper is to be submitted. These will be returned following week with comments for improvement. Students will have the opportunity to revise the draft. If it is deemed necessary, the instructor will meet with students who are experiencing difficulty.
8. the final draft of the paper will be handed in the last week of class.
9. the final grade will be based on content(70%) and writing(30%).

Evaluation: Your paper will be evaluated on the basis of the following criteria:

1. **Content**
Was the information appropriate to the theme of the paper?
Was the information current and reliable?
2. **Comprehension and Style**
Was the paper clear and understandable?
Did you understand the material?
Was the paper written in your own words?
3. **Documentation and References**
Did the references follow the correct style?
Did the content of the paper have proper documentation?
4. **Editing**
Were proper mechanics used in the paper?