

DEPARTMENT OF JURASSIC STUDIES
ASSESSMENT PLAN
OF
THE UNDERGRADUATE MAJOR
APRIL 1995; Revised December 2003

Introduction

In the fall of 1994, the College of Letters and Science informed all departments and programs of the necessity to develop an assessment plan in each undergraduate major and in graduate education by December 31, 1996. The College also indicated that it would solicit plans from selected Departments during this academic year. After prolonged and sometimes heated discussion with our esteemed academic associate dean, the department of Jurassic Studies has “volunteered” to provide one of these pilot plans. It is our understanding that formal assessment is a relatively new activity with potential for misunderstanding or misuse. The college must view our plan as a true experiment from which it can learn both the successes and failures. While our department now strongly supports this experiment, we wish to emphasize that, much like the undergraduate program under review, this plan may change in the future. It is not yet clear that this proposal will produce the benefits we expect and we are not yet sure that we can accomplish all we hope to do within our limited financial budget and our limited human resources. (We will also submit a separate thorough plan for assessment of the Jurassic Studies graduate program.)

We understand that the process of developing a departmental assessment plan involves four steps:

1. We need to articulate clearly and precisely a set of educational goals and objectives for our Jurassic Studies.
2. We need to identify and describe instruments or methods for assessing student achievement at important stages in the program. These methods should measure the extent to which we achieve the goals specified in step 1.
3. We need to develop a feedback mechanism so that the results of the instruments and methods described in step 2 are used for improvement for our undergraduate major and our graduate program.
4. We need to establish a realistic timetable for achieving the previous three steps.

Each of the four sections below addresses one of these issues.

We wish to emphasize that the construction of this plan involved the participation of all members of the Department of Jurassic Studies. Initially, the chair, T. Rex, appointed an Assessment Committee consisting of one faculty member from each of the four major subfields in the department to develop a preliminary plan: Paleobiology (Professor Ima Phossil), Dinosaur Behavior (Professor A. G. Rensitive), Physical and Geological Studies (Professor Hardas Stone), and Jurassic Literature (Professor Michelle Crayton). The department distributed this plan to all members of the department with a request for suggestions and comments. The suggestions were incorporated into a second version of the plan which was discussed at length at a special departmental meeting in March. The departmental faculty roster now lists 28.5 FTE and after lengthy discussion, the plan was adopted by the department by a vote of 23 in favor, 3 opposed, and 2.5 abstaining. We regard this as strong support for this pilot assessment project.

Educational Goals and Objectives

In some sense, the hardest task facing the Assessment Committee and the Department as a whole was to provide a clear and precise set of educational goals and objectives. In the end, the department decided

that the objectives of the undergraduate major should be subdivided into two types: knowledge goals and skills goals.

Since Jurassic Studies is a rapidly evolving field of research, it is almost impossible to determine a precise set of knowledge goals. In fact it is clear that new research developments will continually affect the requisite knowledge for an undergraduate degree. This view is supported by a recent publication by the SAJS (Society of American Jurassic Scholars) called *Basic Undergraduate Training in Jurassic Studies*. (We attach this document as an appendix to this plan). This document lists seven basic areas of knowledge which the Society considers essential for an undergraduate degree but then calls for a periodic review of these areas. In general, our department agrees that the areas listed in the document are essential but prefers instead to list the following six basic areas of knowledge as critical for an undergraduate major:

1. Knowledge of the basic geological and physical evidence for belief in the previous existence and subsequent extinction on dinosaurs;
2. Basic knowledge of the biological basis of dinosaur existence, including our understanding of the dinosaur food chain;
3. Knowledge of the variety of dinosaur species;
4. Basic knowledge of our current understanding of dinosaur behavior;
5. Some acquaintance with field methods in Jurassic research;
6. Knowledge of the basis canons of Jurassic literature.

In addition to acquiring this specific knowledge, we expect undergraduates majoring in Jurassic Studies to develop certain important skills. They are:

1. The ability to read critically and independently about Jurassic Studies;
2. The ability to clearly communicate ideas about Jurassic Studies through both written documents and oral presentations;
3. The ability to understand quantitative arguments relating to Jurassic Studies;
4. The ability to understand, appreciate, and deconstruct the outstanding canons of Jurassic literature;
5. The ability to use modern Information Technology as it relates to Jurassic Studies such as computer statistical packages and reconstructive visual design packages.

The specific knowledge we believe is essential for an undergraduate degree in Jurassic Studies is obtained primarily through courses and seminars offered in our department and the departments of geology, zoology, and comparative literature. However, the skills we expect undergraduates to acquire are often learned in a much broader context through general education courses in communication and quantitative reasoning, through introductory courses in computer sciences, and through writing intensive courses offered throughout the college.

We expect that undergraduates will acquire the specific knowledge necessary for a major in Jurassic Studies through taking the introductory sequence Jurassic Studies 101 and 102 and then through taking one of a variety of programs leading to the Jurassic Studies degree as described in our requirements for the major. (We attach a copy of these requirements as an appendix to this report).

Instruments and Methods for Assessment

Before describing some of these methods we wish to reiterate certain points about the nature of assessment.

1. The data that is produced by the assessment measures is intended to provide the department with information about successes and about needs for change. It is not intended to evaluate individual students or faculty.
2. It is easy to misinterpret an individual numerical datum, and so our assessment instruments will include both quantitative and qualitative measures. The data must be viewed as a whole and individual parts must not be used out of context.
3. The assessment program must not inhibit innovation or risk taking in teaching techniques and learning. Rather, the assessment process should be used to encourage trying new pedagogical techniques.
4. The assessment process should build on and not replace ongoing curricular review. In particular, the department already has an Undergraduate Curriculum Committee which has periodically reviewed all the department's undergraduate offerings. We intend to center the assessment process and in particular, the feedback mechanism of assessment around the activities of this critical department committee.

This being said, the Department of Jurassic Studies intends to use a variety of instruments to measuring student achievement. These include:

1. *Capstone Evaluation*
The Department of Jurassic Studies offers several Junior and Senior levels courses for majors which we view as capstone courses. These include JS 553, "Modes of Jurassic Research", JS 578, "Survey of Current Issues in Jurassic Studies", and JS 690, "Senior Seminar in Jurassic Studies". The Department will require annual reports from faculty who teach these courses indicating their experience with the level of preparation of the enrolled students.
2. *Embedded Testing*
The Department of Jurassic Studies Undergraduate Curriculum Committee will prepare a series of examination questions which will be included in the final examinations of all Jurassic Studies courses. These questions will be appropriate to the level of the course and will attempt to gauge the success of student learning of specific knowledge. The results of these questions will be returned (with names of students and instructors removed) to the committee.
3. *National Testing and Standards*
The Department of Jurassic Studies will use the DNA test, (Dinosaur National Aptitude) multiple choice test provided by the SAJS. This examination will be administered to all undergraduates majoring in Jurassic Studies during the fall semester of their senior year. The results of these tests, along information on the national average scores, will be submitted yearly to the Undergraduate Curriculum Committee.
4. *Portfolio Evaluations*
For those undergraduates whose subspecialty is Jurassic Literature, the department will maintain anonymous portfolios consisting of final examinations and term papers written during the junior and senior year. A subcommittee of the Undergraduate Curriculum Committee will periodically review these portfolios.
5. *Other Possible Measures*
As the Department of Jurassic Studies moves forward with its assessment program, it may consider other methods to judge the extent to which its program succeeds. Since the current document is for a pilot program, the department feels it should begin with the four measures indicated above. However, in the future the department may also use student and alumni surveys, exit interviews, and thesis evaluations as additional assessment methods. The department does

not wish to use these methods immediately since there are problems involving the maintenance of anonymity so crucial to the assessment program.

Also, the department is strongly opposed to the use of pre-test/post-test evaluation. We are concerned that the use of such tests would lead to instructors “teaching for the test” and might seriously inhibit experimental methods of teaching and learning.

The Feedback Mechanism

As indicated above, the department’s Undergraduate Curriculum Committee will play a central role in the part of the assessment process which determines whether the curriculum and student services need change or improvement. All of the assessment measures discussed above will be reviewed annually the committee. On the basis of this review, the committee will provide the department and the college with an annual report. This report will include:

1. An annual summary of the knowledge goals which the department expects its majors to achieve. We expect that this summary will be relative unchanged from year to year unless major developments in Jurassic Research indicate the need for revision of the undergraduate curriculum.
2. The ways in which the Jurassic Studies major is successful in achieving the educational goals set out by the department.
3. Suggestions for changes in curriculum or pedagogy if the assessment measures indicate that problems exist or changes are needed.
4. Suggestions for changes in the measures or methods of assessment if the committee feels that the current practice does not adequately capture the needed information.

The Undergraduate Curriculum Committee will present this report to the full department each year. The department will then vote to accept or reject the report. If the report is accepted, the department will send a copy of the report to the College of Letters and Science Deans’ Office. The department will also submit these reports during the periodic ten year reviews of the department conducted by the college.

Timetable for Implementation

During the 1995-96 academic year, the Undergraduate Curriculum Committee will initiate the assessment measures listed above. The department hopes that some of these measures will actually provide data to the committee by the end of the academic year. In all cases, the committee will expect full data from the measures during the 1996-97 academic year.

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Notes to consider for plan revision, December 2003 (E.M. Klein)

- Update history and condense explanation of assessment requirements
- Add thesis evaluation for all students, delete DNA examination (cost-prohibitive)
- Change embedded testing to second semester courses at sophomore level and above (instead of all course strategy)
- Revise timeline: alternate thesis evaluation with review of embedded testing results
- Change report strategy: Executive summary to Dean, full report to JS Curriculum Committee (and, when necessary, to L&S Curriculum Committee).