

TEACHING TIP SHEET

A Constructive Approach to Student Assessment and Course Evaluation

Janet Rankin (Engineering) and Laura E. Hess (East Asian Studies),
Associate Directors, Sheridan Center

The following model for a constructive approach to student assessment and course evaluation uses the course syllabus to clearly align and explicitly link course objectives and student assessment. Excerpts from two sample syllabi, one from a language course and one from engineering, are provided below to illustrate this concept. Student evaluations can be used to explore the effectiveness of chosen forms of assessment in the fulfillment of course goals and objectives. On the reverse side of this page is a table which charts the correlation between course objectives and student assessment. To help you with this process, a course objective and the corresponding forms of student assessment from each of the sample syllabi are included in the first two rows of the table. You may wish to complete this table, drawing on the

objectives and forms of student assessment from one of your courses.
Example I – CI 0010 “Basic Chinese”

Course Description

This is the first semester of a yearlong introductory course in Standard Chinese (Mandarin).

Course Goal

The purpose of this course is to enable you to develop basic proficiency in speaking, listening, reading and writing Standard Chinese.

Course Objectives

By the time you complete Basic Chinese, you should be able to:

- use basic grammar patterns,
- speak with accurate pronunciation and intonation, as well as a certain level of fluency,
- carry on simple conversations,
- communicate your needs,
- write approximately 600 traditional characters and recognize their simplified counterparts,
- read and write short narratives.

Assessment

As indicated below, the various forms of assessment for this course have been specifically selected to help you achieve the course objectives. Your performance on these will be

taken as an indication of how well you are mastering the material covered in class and achieving the course objectives.

Assessment Criteria

- *Writing Workbook* – provides practice in writing traditional and simplified characters
- *Patterns & Exercises Workbook* – provides practice in using basic grammar patterns, writing traditional characters and writing short narratives.
- *Tapes* – demonstrate the accuracy of your pronunciation and intonation, and your overall fluency.
- *One-on-One Drill Sessions* – provide an opportunity for you to practice using basic grammar patterns; to improve your pronunciation, intonation, and fluency; and to practice carrying on simple conversations and communicating your basic needs.
- *Oral Exams* – test your pronunciation, intonation and fluency; and your ability to carry on simple conversations and convey your basic needs.
- *Quizzes, Tests and Final Exam* – test your mastery of basic grammar patterns, your ability to write traditional characters and read simplified characters, and your ability to read short narratives.

Example II – EN 0072

“Introductory Engineering Thermodynamics”

Course Description

This is a first course in engineering thermodynamics. Topic studied include: the first and second laws of thermodynamics as applied to closed and open systems, thermodynamic energy functions, entropy, heat transfer, phase diagrams, and chemical reactions.

Course Goal

This course is designed to give you a general background in, and working knowledge of, thermodynamic principles and practices as they relate to issues in engineering.

Course Objectives

After successful completion of this course, you will be able to:

- determine the thermodynamic principles which underlie specific problems and applications in mechanical, chemical and materials engineering,
- establish criteria to assess the relative importance of available information in the solution of engineering problems in thermodynamics,

- apply thermodynamic principles to the solution of engineering problems,
- design complex systems to perform specified tasks/and or achieve specific outcomes (e.g. the design and assessment of a thermal desalination plant, or a steam power plant).

Assessment of Student Performance

The forms of assessment utilized in this course have been chosen *both* to help you meet the stated course objectives, *and* to help you understand to what extent you have met those objectives.

Forms of Assessment

- *Weekly Problem Sets* - provide practice in, and establish a knowledge base for the solution of problems in thermodynamics.
- *Bi-Weekly Quizzes* - test your knowledge of fundamental principles which are necessary for the practical solution of problems in thermo.

- *In-Class Exams* - test your ability to synthesis information from a variety of sources into a comprehensive understanding of broad classes of problems in thermodynamics.
- *Labs* - provide you with the opportunity to operate laboratory equipment, to make specified measurements, and to use collected data in subsequent thermodynamic calculations.
- *Design Project* - will give you the opportunity to work on an open-ended, real-life application of thermodynamics. In the design project you will design a specified process or facility, subject to the set of criteria provided. Your design and subsequent calculations must satisfy a set of provided criteria, and must take into account economic, as well as engineering considerations. You will hand in several drafts of your design and calculations.

COURSE OBJECTIVES	FORMS OF ASSESSMENT
<p>Basic Chinese:</p> <ul style="list-style-type: none"> • speak with accurate pronunciation and intonation, as well as a certain level of fluency, 	<ul style="list-style-type: none"> • Tapes • One-on-one drill sessions • Oral exams
<p>Introductory Engineering Thermodynamics:</p> <ul style="list-style-type: none"> • apply thermodynamic principles to the 	<ul style="list-style-type: none"> • Weekly problem sets • Bi-weekly quizzes

Teaching Tip Sheet

solution of engineering problems	<ul style="list-style-type: none">• In-class exams• Design project

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