

## Table of Contents

<b>Introduction.....</b>	<b>3</b>
<b>About MSU Students.....</b>	<b>11</b>
<b>Planning Your Course.....</b>	<b>13</b>
<b>Teaching Strategies.....</b>	<b>34</b>
<b>Evaluating Teaching and Learning.....</b>	<b>64</b>
<b>Marketing Your Teaching Credentials.....</b>	<b>84</b>
<b>Campus Resources and Policies.....</b>	<b>91</b>

## ACKNOWLEDGEMENTS

This, the ninth edition of *MSU TA*, is the result of the efforts of many MSU faculty and staff. The original Handbook Committee, who shaped its direction and concept, and compiled, wrote, and edited *MSU TA*, consisted of Dr. Ann Austin, Dr. Martin Benjamin, Dr. Elaine Cherney, Dr. Jelena Gill, Dr. Karen Klomparens, Dr. Gail Richmond, Dr. Barbara Steidle, Dr. Marilyn Wilson, and Sherry Wynn. This edition also builds upon the work of previous TAP directors, including Kevin Johnston and William Rittenberg.

Several handbooks from other universities were helpful in both the conception of *MSU TA* and its subsequent revisions, including: *Mentor: A Handbook for New Teaching Assistants (9th Edition)*, U of Washington; *Teaching at Ohio State University: A Handbook*, The Ohio State University; *A Handbook for Teaching Assistants*, The University of Tennessee, and *Teaching at North Carolina*, The University of North Carolina, Chapel Hill.



## INTRODUCTION

This handbook is designed to help you thrive as a Michigan State University Teaching Assistant (hereafter referred to as TA).<sup>1</sup> We offer these resources as to help support you in your instruction as a successful MSU TA, and hope it helps you lay a great foundation for a successful career.

## ONLINE TEACHING MODULES

Before we move into the handbook itself, I want to draw your attention to online training modules offered by the MSU Graduate School. These are very high-quality, online, on-demand courses provide you with FREE, comprehensive professional development around teaching. Together with this handbook, you have great resources to become a fantastic teacher. Throughout this handbook, we will draw your attention to relevant TECHE modules, as the information complements each other in profound ways.

There are currently nine topics you may explore:

- Lecturing 1
- Lecturing 2
- Resources to Enhance Student Learning
- Making the Most of Discussion
- Supervising Projects and Dissertations
- Marking [Grading] and Giving Feedback
- Understanding Course Design
- Developing Your Teaching
- Teaching with Patients

To access these modules, follow these simple instructions (you must have your MSU NetID available to log on).

Log-in to <http://angel.msu.edu> with your MSU NetID and Password.

» Under My ANGEL Groups, click Find a Group.

» Enter “Teaching Essentials for Careers in Higher Education” in the search field.

» Click Search.

» “Teaching Essentials for Careers in Higher Education” should appear on the search result. Click “Enroll by PIN.”

» On the pop-up window, enter the PIN “SPARTY” (no quotes; all caps)

» Click Subscribe.

---

<sup>1</sup> As of May 2002, MSU teaching assistants voted to select the Graduate Employees Union to represent them in bargaining with the MSU Administration. As part of the bargaining process, the GEU requested that teaching assistants be referred to as “graduate employees.” For the purposes of this handbook, we use the terms “teaching assistant.” Visit the GEU Website for more information <http://www.geuatmsu.org/>.

» Return to ANGEL homepage, the group Teaching Essentials for Careers in Higher Education will be listed under your ANGEL Groups.

## HOW TO USE THIS HANDBOOK

This manual is full of suggestions, pedagogical models, and resources. There is too much here to digest at one sitting. **For quick reference, however, we have provided you at the end of each section a selective bibliography of works addressing the issues covered in each chapter.** We anticipate that each of you brings varied expertise and experience with you to your teaching experiences, and we also know that assistantship responsibilities vary from department to department. Give these, we have therefore tried to provide enough variation to serve your different needs. We suggest that you give the handbook a good general once-over, noting sections that are immediately useful to you based on your responsibilities and needs at this time. We encourage you to hold on to this handbook so that you can revisit it as your teaching expertise grows, as you will likely learn new things each time you review it.

Do not allow the handbook to overwhelm you. It is a valuable resource, one that you will be able to refer to repeatedly. We suggest that you create your own loose-leaf binder to insert helpful essays, your syllabi, workshop notes, and student evaluations. Perhaps you might consider eventually participating in MSU's Teaching Certification Program, which as part of its requirements for completion has participants create a professional teaching portfolio. <sup>2</sup>

Before you begin employing any of the suggestions contained herein, however, please familiarize yourself with your department's procedures. Your department should also have a handbook or similar information resources for you to consult, both for administrative and pedagogical issues. It is essential that you find out just what your department expects concerning all issues of instruction before you begin planning for your assistantship duties.

## ASSUMING THE RESPONSIBILITIES OF A PROFESSIONAL

As a TA, you may confront a variety of challenges. Perhaps you are a first-time graduate student, facing the challenges of setting professional goals while adjusting to the demands of graduate work. You may have little teaching experience, or might not even really enjoy teaching. Sometimes, novice TAs are concerned about mastering and communicating the content of their subjects effectively, so it can be difficult to imagine grappling with topics about what it means to be an effective, professional teacher, and what your "teaching philosophy" might be. Do not worry; experienced teachers continue to explore their teaching identities. It is a process,

---

<sup>2</sup> See <http://grad.msu.edu/collegeteaching/> for more information about the Certification in College Teaching Program.

and if you are just beginning this process, rest assured that there are many resources available to help you.

Though many of your teaching responsibilities are flexible, open to your experiences and preferences, other teaching responsibilities are quite explicit, and you must pay attention to these institutional policies. For example, MSU requires all instructors-- be they TAs or faculty members—to follow the guidelines of the "Code of Teaching Responsibility." This document is available at the website for the Registrar's Office: <http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=514>,

## **THINKING AND ACTING PROFESSIONALLY**

Remember, that even if you do not feel confident in your teaching, you are still a teaching professional. Even though you may have recently been an undergraduate student, and even though you are still—and primarily—a student yourself, in your work as a TA, you have responsibilities to your students that require you to maintain professional standards.

The following list is not exhaustive, but serves to illustrate the type of behavior expected of professionals and addresses some of the areas that concern TAs most. It is important that you keep communication lines open between you and your teaching advisor, so that you are fulfilling what is expected of you in your role as a teacher.

- Most importantly, learn and take seriously the policies regarding your role. Keep yourself informed of policy changes at the institution and department level.
- Learn to enforce the policies fairly. Be firm and uphold standards. It may involve making decisions that disappoint others.
- Be a reliable worker. If a student, a colleague, or a teaching team is depending on your input, get the task done well and on time. Be prompt for meetings and timely in returning student work.
- Know the context and the limitations within which you work. If you are not authorized to change rules or make decisions, do not act unilaterally. Confer responsibly with professional colleagues and faculty supervisors to determine what you may and may not do.
- Respect the dignity of all students. Put aside your personal biases.

- Maintain proper boundaries between professional and personal relationships. In general, avoid personal relationships with non-peers—either your students or your professors.
- Restrain your responses to student conflicts. Attempt to hear and understand their concerns. Remember the ways in which you, as the instructor, bear the greater responsibility in your relationship with students.
- Deal responsibly with problems of course organization and sensitive relations with co-workers. In large courses served by teams of TAs, it is especially important that you take responsibility and ownership for your work the course, even if you are not in control of certain approaches or procedures and disagree with them. Offer your critique or suggestions during planning meetings, not in class in front of your students. Deal maturely and ethically with the frustrations and difficulties that attend any large-scale project.
- Be cautious and discreet about the use of information. Respect privacy. Know the limits of your authority, and the prerogatives of those requesting information. Review the Family Education Rights and Privacy Act (FERPA), a federal law that describes what you can, and cannot, disclose about your students to others. FERPA guidelines can be found here: <http://www.reg.msu.edu/roinfo/notices/privacyguidelines.asp>.

Knowledge and skill in one's discipline is the first requisite of being a teacher or a professor. In addition, you must adhere to a professional code of conduct, which demands skill and restraint, as you meet the challenges and difficulties of the profession with dignity and balance. It may take years to develop a sense of oneself as a competent, discerning professional, but it is important for new TAs to take the first steps of that journey.

Unlike other professions, teaching occurs at what Parker Palmer calls “the dangerous intersection of personal and public life.”<sup>3</sup> Your work as a TA is not like the personal work of a therapist. Your primary duties do not include guiding individual students, one by one, on a personal journey during which intimate confidences are shared. At the same time, your work is not like the work of a lawyer or civil servant who puts aside personal feelings in order to be an advocate for a client who may or may not share your values and goals. The work that you, your students, and your faculty mentor share is work that is motivated by deep intellectual passions and performed in a relatively public place: the university.

---

<sup>3</sup> Parker Palmer, *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life*, San Francisco: Jossey-Bass, 1998, 17. See also, **MSU's Planning, Resilience, Engagement, and Professionalism (PREP)** programs, <http://grad.msu.edu/prep/>.

What makes this path fraught, of course, is that it is very easy to slip off to one side or the other. You can get too close to your students and lose your objectivity. You can keep them at more than an arm's length and deprive them, as well as yourself, of some of the most satisfying moments a teacher can experience. What often makes your work as a TA so gratifying are those moments when you do find common ground with colleagues. For example, those moments in class when you and your students are working together to solve a problem, clarify a question, and map out a new research design; those moments in office hours when a misunderstanding gets cleared up and you are both ready to move on; and those moments with a faculty mentor when you feel free to let your imagination speak.

## **YOU AND YOUR DEPARTMENT / TEACHING ASSISTANT ROLES**

The subsequent sections of this handbook have been written so that they will be generally useable by TAs across the campus. MSU employs teaching assistants in almost every department and in several program offices. These departments utilize TAs in various ways. Even within departments, TAs may have different levels of responsibility (see below). Even in situations where the TA is the instructor, responsibilities vary widely. Some departments provide a syllabus and determine the course objectives. Other departments expect the TA to set grading policies, write a syllabus, and to construct tests and assignments. There are many variations in between. Below is a list of some of the duties TAs perform.

If you have questions about the handbook, classroom procedures, testing, etc., check with your supervising department or refer to any department-specific orientation materials you may have been given. Though you will find excellent general advice throughout this handbook, your first obligation is to heed the expectations of your department, and in many cases the professor of record (the professor in charge of teaching the course) with whom you work.

-----  
-----

"Teaching One's Own Section." The TA is assigned to teach his or her own class. The amount of responsibility will vary from department to department. In some units, TAs are responsible for their own syllabi, course requirements, midterms, and final exams. Other departments have standardized syllabi and exams, and the TA is responsible for covering the necessary material.

"Recitation Section." The TA is responsible for a section within a large lecture course. The lecture is usually given by a faculty member (the instructor of record) and may have an enrollment of up to 500 or 600 students. The lecture class is split into small recitation sections of 20 or 30 students who meet twice a week or so to clarify lecture topics or go over homework problems.

"Lab Section." The TA is responsible for a section of a laboratory class. The TA assists students with experiments and other hands-on assignments. *Common in Chemistry, Computer Science, and other technically-oriented courses.*

"Helproom." The TA is required to spend designated hours in a room with 3 or 4 other TAs answering the questions of students who come for help with the class material. *Most common in Mathematics and Chemistry.*

"Office Hours." The TA maintains designated times during the week to be available in his or her office to answer students' questions.

"Grading." The TA is assigned to one or more professors to grade papers, midterm examinations, final examinations, and other assignments.

### **THE UNIVERSITY, ITS VALUES, AND YOU**

As an institution, MSU embraces the challenges confronting our 21<sup>st</sup> century world. We value educational excellence, the scholarly quest for knowledge, academic freedom, intellectual integrity, creativity, fairness, and respect.

As a member of this University, you will be working with a rich variety of individuals who, by virtue of their involvement in education and research, belong to a unique community of scholars and learners.

One of the most positive features of your university experience will be your exposure to a broad range of cultures and ideas different from your own. You will see students who graduated from small rural schools, large inner city schools, Department of Defense schools abroad, private Eastern prep schools, and from high schools around the world. MSU is, truly, a "world grant" university, a term used by President Lou Anna K. Simon to describe how MSU has expanded its Land Grant tradition. You will meet students, faculty, and staff from a broad range of countries. The diversity of our students, faculty, and staff has enabled MSU to become a global multiversity that reaches across the state, the nation, and the world.

As a member of the MSU teaching staff you will be expected to embrace these values and exemplify them in your teaching, research and service activities. As a multicultural community we will be able to maintain excellence and provide leadership to the larger state, national, and international communities we serve.

### **YOUR ROLE IN THE MSU COMMUNITY**

To be a good teacher is a highly complex activity involving more than just the transmission of information to a group of eager students. We hope that you find all your students will arrive at each session early, having read the assigned readings, and you will be able to prove to them that you are the best teacher they will ever

have. Unfortunately, however, you may encounter classes where some of your students will arrive late, leave early, or be shocked when you announce the first test—even though the date is in your syllabus. Like every campus, MSU has students of all types!

When your students fill out their Student Information Ratings (SIRS), some of the students will say that you were the best teacher they ever had, others will say that you were the worst, and the great mass in the middle will indicate your teaching was okay. Still, you will find teaching challenging and rewarding, and you always have programs, like TAP, and faculty to help you grow as a teacher. Your college and department might offer seminars and opportunities for professional improvement. We hope that you will take advantage of the great variety of learning opportunities that are available to you at MSU. Remember that teachers engage in cycles of learning during which they try a practice, observe its effects, and decide how and when they will use a similar practice. In fact, there is an entire body of academic scholarship—called SoTL (The Scholarship of Teaching and Learning)—that provides instructors opportunity to test their teaching and share their results with others. The best teachers know not only what they are doing but also why it works and why it is likely to work in one kind of environment and not in another. It is our hope that you will use the vast resources of the University and your opportunities as a graduate assistant to become a fine and reflective teacher.

### **Selected Bibliography**

- Boice, Robert M. "Classroom incivilities." *Research in Higher Education*, 37 (August, 1996): 453-85.
- Braxton, John M., & Bayer, Alan E. *Faculty Misconduct in Collegiate Teaching*. Baltimore: Johns Hopkins University Press, 1999.
- Duderstadt, James J. & Womack, Ferris W. *The Future of the Public University in America: Beyond the Crossroads*. Baltimore, MD: Johns Hopkins University Press, 2003.
- Fisch, Linc. *Ethical Dimensions of College and University Teaching: Understanding and Honoring the Special Relationship between Teachers and Students*. San Francisco: Jossey-Bass, 1996.
- Gaff, J. G., and Lambert, L.M. "Socializing future faculty to the values of undergraduate education." *Change*, 28 (July-August, 1996): 38-45.
- Golde, Chris M., & Walker, George E. (Eds.). *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline – Carnegie Essays on the Doctorate*. San Francisco, CA: Jossey-Bass, 2006.

- Kuh, George D., Kinzie, J., Schuh, John H, & Whitt, Elizabeth J. *Student Success in College: Creating Conditions that Matter*. San Francisco, CA: Jossey-Bass, 2010.
- Lewis, Michael. *Poisoning the Ivy: The Seven Deadly Sins and Other Vices of Higher Education in America*. Armonk, NY: M. E. Sharpe, 1997.
- MSU – Responsible Conduct of Research. <http://grad.msu.edu/rcr/ethics.aspx>
- Palmer, Parker. *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life*. San Francisco: Jossey-Bass, 1998.
- Pescosolido, B. A., & Aminzade, R. Eds. *The Social Worlds of Higher Education: Handbook for Teaching in a New Century*. Thousand Oaks, CA: Pine Forge Press, 1999.
- Ropers-Huilman, B. *Feminist Teaching in Theory and Practice: Situating Power and Knowledge in Postructural Classrooms*. New York: Teachers College Press, 1998.
- Sheared, Vanessa, Johnson-Bailey, Juanita, Colin III, Scipio A. J., Peterson, Elizabeth, & Brookfield, Stephen D. Eds. *The Handbook of Race and Adult Education: A Resource for Dialogue on Racism*. San Francisco, CA: Jossey-Bass, 2010.
- Shils, Edward Albert. *The Calling of Education: The Academic Ethic and Other Essays on Higher Education*. Chicago: University of Chicago Press, 1997.
- Smith, Daryl G. *Diversity Works: The Emerging Picture of How Students Benefit*. Washington: American Association of Colleges and Universities, 2002.
- Vollmer, H. M., & Mills, D. L. *Professionalization*. Englewood Cliffs, NJ: Prentice-Hall, 1996.
- Wulff, Donald H., Austin, Ann E., & Associates. *Paths to the Professoriate: Strategies for Enriching the Preparation of future Faculty*. San Francisco: Jossey-Bass, 2004.
- Zachary, Lois J., & Fischler, Lory A. *The Mentee's Guide: Making Mentoring Work for You*. San Francisco, CA: Jossey-Bass, 2009.
- Zachary, Lois J. *The Mentor's Guide: Facilitating Effective Learning Relationships*. San Francisco, CA: Jossey-Bass Publishers, 2000.

## **ABOUT MSU STUDENTS?<sup>4</sup>**

In 2011 MSU had a student population of 47,954; the undergraduate population was 36,675 students and that graduate/professional student population was 11,279. This makes MSU one of the largest single-campus populations of undergraduate students in the nation. International students comprise over 12% of the MSU student population. Nearly 8,000 students will begin their university study this fall, as the entering 2012 freshman class. As a Teaching Assistant, you will have contact with a broad spectrum of the undergraduate population.

Students, especially freshmen, tend to see all instructors as a “teacher,” so do not be surprised if they differentiate little between a first-year TA and a University Distinguished Professor. This means students will frequently rely on you for a variety of academic concerns, but they sometimes may also seek you out to raise a number of concerns external to the classroom or to seek sources of advice from you. These interactions provide a great platform for you, as an instructor, to challenge our students in their critical thinking, and to encourage them to engage actively in the university learning community.

## **STUDENTS' WAYS OF KNOWING**

While it is helpful to consider the demographic characteristics of your students, it is also important to understand where they are in their own development as people and as learners. Though his work has been challenged by more modern approaches to explaining college student development Perry (1970) argued that students move through stages of cognitive development, each of which is qualitatively different and more complex than the previous stage. As students move through these stages, the ways in which they perceive, organize, and evaluate experiences and events in their lives change. In his work, Perry suggests that new or intellectually insecure students are often committed to a sense that information is right or wrong, factual or subjective. Uncertainty leads to discomfort. In order to get students to move out of either/or dilemmas to recognize that the world is full of “grey areas,” instructors can do several things to promote a deeper cognitive engagement with material.

- Provide students with opportunities to choose positions and defend their choices.
- Ask students to narrow choices and weigh pros and cons of alternative arguments or choices.
- Draw upon course material that stimulates thinking about personal philosophy and life choices.
- Design learning tasks that call for students to analyze, synthesize, and evaluate ideas that are rooted in concrete experiences, and then

---

<sup>4</sup><http://msu.edu/about/thisismsu/facts.html>.

progressively to more abstract experiences. Ask students to apply learning from one context to problems in a different context.

- Pose activities that ask students to generate new questions or evaluate assumptions inherent in how points of view are constructed.

### **LEARNING STYLES**

Though there is some debate about the value of considering learning styles when designing your courses, this is always value in trying new techniques to convey information and ideasAs teachers it is important to keep in mind that the concept of style is one variable that may help you look at the complex issues involved in teaching and learning.

In general, researchers have distinguished the following types of learners:

**Auditory learners** prefer to learn by listening. Lecturing is the teaching approach that works for them.

**Visual learners** prefer print material. They learn best by reading or responding to visual cues, such as the chalkboard or overhead projector.

**Tactile learners** like to manipulate objects. Laboratory or hands-on methods of learning are appropriate for them.

**Kinesthetic**, or whole body learners, like to learn through experiential activities. They prefer simulations, exploratory activities and problem solving.

Consider, for example, how you might cover your material and appeal to different learning styles. What would you do to satisfy the auditory learners? How would you cover that same content for kinesthetic learners? The more approaches you take, the more active the learning can be...and the more the students can retain.

## PLANNING YOUR COURSE

Learning is a highly intricate process, with many opportunities to detract from the goals at hand or to leave students behind. The more complicated the material to be learned, the more important it is to organize it and present it in a way that both enhances the process of learning and clarifies the teacher's expectations. That is why effective course design is so essential, and why the syllabus plays such an important role.

### Related TECHE Modules

- Understanding Course Design
- Enhancing Student Learning

<http://tap.msu.edu/teche/>

Many instructors describe the syllabus as a contract between you and your students. The syllabus will make clear to your students which textbooks and other reading materials they must acquire, what your teaching objectives will be and how you will go about finding out whether they have been met, what kind of testing you will use, what the grading scale will look like, whether you will assign homework and at what intervals, whether class participation and/or attendance will influence grades, and even what material you intend to cover during each of the class meetings or weeks. Some departments ask new teaching assistants and young instructors to use existing syllabi (approved by the department) for the courses they are assigned to teach. However, once you become more experienced in teaching, you will be expected to prepare your own syllabi. This is why it is important to learn the characteristics of a good syllabus.

Further, designing a syllabus helps you think more clearly about overall course design: since you have to write a syllabus before class starts, it provides an opportunity for you to design the arc and pace of your course, and determine which content requires you to slow your pace for example.

This section will point out some important aspects of a well-written syllabus and present several good syllabi that were used in actual MSU courses. Each of them represents well certain aspects of a competent syllabus.

## ORGANIZING THE COURSE

In order to prepare a meaningful syllabus, one that you will be able to follow throughout the entire semester, you must first examine closely the entire course with a goal of organizing it in a way that will enable you to accomplish the objectives you will state.

Good organization is important to all phases of instruction, from curriculum development to determining presentation format. From the syllabus to the final

examination, every aspect of the course should be focused on defined educational goals, and all activities (pedagogical approach, application assignments, tests, and such) should lead directly to these learning outcomes. This is a notion called instructional alignment.

The first step is to determine **learning outcomes**, those ideas, concepts, or information you expect a student to have mastered by the end of the course. Once you know what a student should expect to have learned at the end, you can go back to the beginning, to design a “map” that will lead you and your students to these predetermined learning outcomes.

The next step is to figure out **how to get to these outcomes** most effectively. What methods will you use? When, and how, will you provide assessment opportunities for students to make sure they are keeping up with your pace? What activities or projects will they do, and how do these move students to the outcomes you have designed? If you need to cover 50 years of research in 15 weeks, you will probably lecture. If students must be capable of applying course material, you will not only have to present factual information through texts and lectures but also show them how to develop generalizations from the background knowledge (discussion, study problems, assignments), and provide them with opportunities to apply newly learned principles in novel situations (laboratory experiments, papers, examinations, projects, speeches).

Then, you will need to **establish the level of performance** you expect from your students. This may necessitate your administering a simple questionnaire or using an in-class essay to determine what students already know and what they need to learn. *If you are teaching a lab, quiz section, or studio that is an extension of a larger class, it is important to coordinate your expectations with the professor of the larger class and with other TAs who are teaching similar sections, labs or studios.*

Finally, you will need to determine which **evaluation** procedures will reveal if students have learned what you intended. Ideally, procedures for evaluation should be consistent with course goals and teaching strategies. The mode of instruction, the course content, assignments, and examinations should all focus students' attention in a single direction.

### **The Importance of the Syllabus**

Having a well-developed syllabus will require the instructor to organize his or her teaching early. It will help students know what is expected from the start of the course and will allow them to plan their semester efficiently. The opportunity for inconsistent grading changes will be diminished, and a positive image will be presented to the students (a well-prepared syllabus is evidence that the instructor takes teaching seriously). A syllabus also provides the departmental office, supervisor, and/or colleagues with pertinent information about the course.

**The Ombudsman's Office has noted that a large number of complaints it deals with have at their root a lack of understanding of the requirements and expectations for performance in a course.** A syllabus can consolidate into a single document all of the routine matters that surround teaching a course: reading schedules, grading, due dates, class topics, etc.

Simply put, the syllabus is a formal statement of what the course is about, what students will be asked to do, and how student performance will be evaluated. Unlike the comments an instructor makes in class, it is an enduring document to which students can refer again and again throughout the course. Careful construction of the syllabus reduces ambiguity and is the first step toward producing an environment in which students can flourish.

The syllabus is an agreement that you should follow as much as possible. If you make any changes to it during the semester, be certain that all your students are aware of them. You do not want to have to deal with an irate student at the end of the semester who would say to you something like, "Hey, I didn't know that you changed the course grading system, and I'm going to the departmental chair to get this straightened out!"

### **Preparing Your Syllabus**

You can begin by studying syllabi from other instructors or those that have been used previously in the course being taught. You might also check with your department for specific guidelines about a syllabus format. However, the following should be included in every syllabus:

1. **Relevant information about the course and instructor.** A syllabus should include the current year and semester, the name and number of the course and the meeting time (with days of the week and meeting times), and location. It should also include the instructor's name, phone number, the location of the instructor's office, and the times of his or her office hours. These facts are normally placed at the beginning of the syllabus.

2. **A list of the resources to be obtained by the students.** Most important here are the required text(s) and reading assignments. Their role in the class and where they are available for purchase or loan should be included. (It is important to check that the bookstore or library will have the materials on the shelves before students are sent to find them!) It might also explain what, if any, materials other than text(s) are required of students. Any supplemental materials (such as lecture tapes, sample projects, or past tests) that are available can also be mentioned.

3. **A clear statement of course objectives.** The course objectives should be as clear as possible and should describe what the students will be expected to know—and at what level of competency—at the end of the semester, rather than what the instructor plans to do. Note that the use of vague terminology (such as "students will develop a clear understanding") can result in arguments over degrees of understanding. It is generally better to use specific, measurable learning outcomes.

4. **A description of the means (or activities) by which the course objectives will be met.** Possible items include field trips, guest lecturers, discussions with active participation, problem-solving groups, assignments, use of audiovisual materials, etc. The amount of student time required for each activity may be estimated.

5. **A statement of grading criteria.** This will explain the grading criteria, the components of the final grade, the weighing of various components, the impact of class participation and attendance to the final grade, and other relevant information. The number of tests each semester should be included, along with a brief description of what each test will cover. The numerical equivalent of letter grades or the "range" for each grade can be provided.

6. **A statement of course policies.** This is best expressed in a clear, non-threatening form. Policies should be set for such events as missing an exam, turning in a late assignment, missing class, requesting an extension for an assignment, and reporting illness. It is a good idea to go on record with a fairly stringent policy that can be informally softened at a later date if, and where, circumstances so warrant. The Ombudsman's Office recommends avoiding absolutes on the grounds that they are always more trouble than they are worth.

7. **A schedule.** If each class hour is mapped out in detail, this will become the longest and most time-consuming segment of the syllabus to prepare, although it will be a good investment in a well-organized class. The syllabus should, at a minimum, contain dates and corresponding lecture or lab topics, the preparations that are required or suggested, and due dates for projects, papers, and major assignments.

### **USING THE SYLLABUS IN CLASS**

First, check over the final typed copy for mistakes and typos. If the instructor does not spot them, it is certain that the students will. Students will expect you to hand out the syllabus on the first day of class. That lets the students know that their teacher is well prepared and it provides an easy way to begin the interaction with students and to reduce some of the uncertainty and anxiety of the first class meeting.

The instructor will need to review and discuss the syllabus with the students, to answer any questions that they may have and to provide appropriate amplification where necessary. The instructor will probably find that most student feedback will be generated by the section on grading.

It is vital to have enough copies of the syllabus; one should allow for the need to replace lost copies and to accommodate students who have registered for the class but do not appear on the initial roster.

If changes are made in the syllabus subsequently, it is a good idea to give them to students in writing. Much ambiguity and confusion can result from half-remembered, spoken promises. Changing your syllabus throughout the course is not impossible, but make sure you have a plan in place to make sure all students are kept up-to-date on changes.

### **Examples of Well-Written Syllabi**

Following the bibliography, you will find syllabi that at one time or another were used by MSU faculty. Notice that, although they do not follow the same format, each provides relevant information concerning the course in question. Upon reading a specific syllabus, try to think of a question concerning the course that the syllabus does not address; if you can come up with such a question, find a place in the syllabus where it could be easily incorporated. Also, analyze whether, as the semester would progress, the existing syllabus would answer all questions you might come up with. While doing this, keep in mind that it is only by planning your teaching well in advance that you will be able to anticipate everything your students will need and to put it all together in a syllabus.

### **Selected Bibliography**

Altman, H. B. and W. E. Cashin. *Writing a Syllabus. IDEA Paper No. 27.* Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University, 1993.

Chickering, A. W. and Associates, Eds. *The Modern American College: Responding to the Realities of Diverse Students and a Changing Society*. San Francisco: Jossey-Bass, 1981.

Claxton, Charles S, and Murrell, Patricia H. *Learning Styles: Implications for Improving Educational Practices*. College Station, TX: Association for the Study of Higher Education, 1987.

Grunert, Judith. *The Course Syllabus: A Learning-Centered Approach*. Bolton, MA: Anker, 1997.

Kennedy, Hyland, and Ryan (n.d). Writing and Using Learning Outcomes.  
[http://sss.dcu.ie/afi/docs/bologna/writing\\_and\\_using\\_learning\\_outcomes.pdf](http://sss.dcu.ie/afi/docs/bologna/writing_and_using_learning_outcomes.pdf).

Kolb, D. A. *Learning Style Inventory*. Boston: McBer, 1985.

Lambert, Leo M., Stacey Lane Tice, Patricia H. Featherstone. *University Teaching: A Guide for Graduate Students*. Syracuse, NY: Syracuse University Press, 1996.

Leamson, Robert. 2002. *Learning (Your First Job)*  
[http://www.ntlf.com/html/lib/suppmat/learning\\_your\\_first\\_job.pdf](http://www.ntlf.com/html/lib/suppmat/learning_your_first_job.pdf)

McKeachie, W., et. al. *Teaching Tips: A Guidebook for the Beginning College Teacher*, 10<sup>th</sup> Ed. Lexington, MA: Houghton Mifflin, 1998.

Nelson, Craig. "For Openers, an Inclusive Course Syllabus." *New Paradigms for College Teaching*. William E. Campbell and Karl A. Smith, Eds. Edina, MN: Interaction, 1997.

Nilson, Linda. *Teaching at its Best: A Research-Based Resource for College Instructors*, 3<sup>rd</sup> Edition. San Francisco, CA: Jossey Bass, 2010.

# AEE 110: Foundations of ANR Communications, Learning & Leadership - Fall 2004

<b>Meeting time</b>	Section 001 48 Agriculture Hall Tuesday and Thursday, 10:20 – 11:40 a.m.		
<b>Instructor &amp; assistant</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Jim Lucas 408 Agriculture Hall 517/355-6580 (ext. 233) lucasjam@msu.edu</td> <td style="width: 50%;">Glenn Sterner sternerg@msu.edu</td> </tr> </table>	Jim Lucas 408 Agriculture Hall 517/355-6580 (ext. 233) lucasjam@msu.edu	Glenn Sterner sternerg@msu.edu
Jim Lucas 408 Agriculture Hall 517/355-6580 (ext. 233) lucasjam@msu.edu	Glenn Sterner sternerg@msu.edu		
<b>Course description</b>	AEE 110 introduces students to communication, learning and leadership philosophies in the context of agriculture and natural resources. The course provides a collaborative learning experience that promotes reflective and critical thinking to enhance writing, presentation, and interpersonal skills needed at Michigan State University and beyond.		
<b>Course philosophy</b>	<p>The faculty designed AEE courses to help student connect information from their technical science courses (e.g., animal science, ecology, forestry, horticulture, etc.) and their professional courses (e.g., teacher education, communication, journalism, etc.) to working with people in formal and informal settings. As such, this class will help you to integrate your knowledge and understanding of ANR issues into techniques that facilitate the development of others' ability to understand these issues.</p> <p>This course is designed as an interactive and developmental experience; students share the responsibility for learning with the instructor. Hence, they are encouraged to provide feedback and opinions on operation and policies within the course.</p>		
<b>Course goals</b>	<p>AEE 110 seeks to provide students with:</p> <ol style="list-style-type: none"> <li>1. The ability to succeed during their time at MSU;</li> <li>2. The ability to engage in the world as a self-aware individual;</li> <li>3. The ability to understand values and ethics in relationship to decision-making;</li> <li>4. The ability to understand, analyze and respond to information concerning agriculture and natural resources.</li> <li>5. The ability to communicate logically, expressively and concisely using written, oral and visual forms of communication;</li> <li>6. The ability to apply research and thinking skills to develop and deliver information to diverse audiences; and</li> <li>7. The ability to understand and apply learning theory to effectively lead, communicate and manage.</li> </ol>		

## Class Resources

Students should purchase the required materials at a campus bookstore (or on-line, it's probably cheaper!):

- *Perks of Being a Wallflower*
- *A Portrait of a Burger as a Young Cow*
- *Recommended: AP Publication Manual (5<sup>th</sup> edition or higher)*

## Attendance

Attendance for the course is mandatory. Students will receive two excused absences regardless of cause. ***All absences beyond two will count as unexcused.*** Students will receive –15 participation points for each unexcused absence. Students who fail to use their two excused days will receive 10 points extra credit per day (for up to a total of 20 points). Attendance bonuses and deductions will be maintained on Angel.

The instructor will work with students on a case-by-case basis for excessive absences due to official MSU activities, illness or other serious emergencies. In these cases, instructors will require documentation of the event, illness, etc. ***Students missing class for a planned MSU field trip (e.g. FFA conference, judging event, class trip, etc.) must submit a written request or permission slip to the teaching assistant one-week before missing class.***

Students are responsible for obtaining any information or materials missed due to an absence and should contact the instructor or teaching assistant within 24-hours of missing class. Please see the late assignments section for more information.

## Participation

Throughout the semester, the instructor will expect active participation in all class discussions and activities. Active participation includes, but is not limited to, the following behaviors:

1. Asking and answering questions in class;
2. Questioning information presented and discussed;
3. Engaging in on-line discussions with your team;
4. Participating in peer critiques with your base group; and
5. Grappling with course content on a personal-level.

The instructor will also expect that students complete any homework or reading activities assigned. The instructor or a teaching assistant will periodically update participation points on Angel.

## Assignments

Specific guidelines for all assignments and activities are provided following the syllabus. All assignments are due by 5:00 p.m. on the specified date, unless otherwise noted in class. Assignments should be turned in during class, via Angel drop-box, or in the instructor's departmental mailbox.

Homework/Participation	300 points
ANR Interviews and paper	150 points
Reading reflections	150 points
Issue papers	100 points (2 @ 50 each)
Issue presentation	150 points
Reflective responses	150 points (3 @ 50 each)

## Assessment

AEE 110 students will receive a numeric grade according to the point scale below. The instructor will take into consideration those students within two or three points of a higher grade on a case-by-case basis. When making this determination, factors such as class attendance, participation and effort will be important.

<i>Points</i>	<i>Grade</i>
930 – 1000	4.0
875 – 929	3.5
825 – 874	3.0
775 – 824	2.5
725 – 774	2.0
675 – 724	1.5
625 – 674	1.0
under 624	0.0

## Base groups

The instructor has organized students into base groups. Base groups will provide a foundation for many class discussions and activities. Also, the base group will specifically:

1. Keep its members informed of class information or policy in case of an absence.
2. Support its members' writing by providing peer critique.
3. Identify common questions or areas of concern as related to class or life at MSU.

## Formatting your work

Unless otherwise noted, students should type all assignments using a 10- or 12-point font size, standard typeface (Arial, Times, etc.), double-spacing and one inch margins. All papers should include page numbers. ***Assignments without a name or not matching the formatting guidelines will not be graded.*** For citations, students should follow standard AP format guidelines (4<sup>th</sup> or 5<sup>th</sup> Edition).

Students who plagiarize others' work will receive no credit for the assignment. The instructor will enforce MSU policy on plagiarism as detailed in the Spartan Life handbook.

## Late work

All assignments are due by 5:00 p.m. on the specified date unless otherwise noted in class. Instructors will accept late assignments for up to five working days (days on which classes are held) past the due date with a 20 percent deduction from the total possible points.

Students who will miss class due to official MSU trips or events should make arrangements with their instructor to turn in any assignments they will miss. Students who miss class for illness or other emergency should work the instructor to arrange an appropriate turn-in date.

## Redoing your work

Students have the opportunity to rewrite papers that have earned less than a 3.0 (83%). Students who are concerned about their performance are encouraged to talk with the instructor before the final week of the semester.

Students wanting to redo an assignment must complete the revisions within one week of receiving the graded work. *All students should meet with the instructor about the rewrite before completion to ensure that they return a quality product.*

## Schedule

The following is a general overview of each week's topics, readings and assignments. For more details on the assignments, refer to the pages following the syllabus.

### WEEK 1

Tuesday, August 26

- Introductions
- Overview of syllabus and the course
- Overview of Angel system
- Community needs and expectations

*Assignment: Read Jim's Teaching Philosophy Essay; complete on-line reflection by Thursday*

Thursday, August 28

- Team builders and icebreakers
- Discussion of essay

*Assignment: Bring values worksheet back to class for discussion on 9/2; Start ANR Interviews assignment (due October 2)*

### Week 2

Tuesday, September 2

- Introduction to values and ethical frameworks
- Discussion of class values and ethics

*Assignment: Using the ethical frameworks discussed in class, work through the ethical dilemma presented for discussion on 9/4*

Thursday, September 4

- Using values and ethics in daily life
- Decision-making and professional behavior
- Time for group work

*Reminder: Be reading Perks of Being a Wallflower, working on your interviews and your presentations.*

**ISS 310, Section #2**

Mon., Tues., Wed, & Fri., 11:30-12:20  
Room 116 Natural Science Bldg.

**Professor Whitsell**

Office: 310 Natural Science (353-7197)  
Office Hours: 2-3 Mon., Tues. & Wed.  
or by appointment

**PEOPLE AND THE ENVIRONMENT**  
**SYLLABUS**

**I. Course Objectives and Content**

As described in the catalogue of courses, ISS 310 deals with "contemporary issues related to the interaction of socio-cultural and ecological systems. Global, regional, national and local environmental problems and responses." Different ISS sections of the same course are taught from the various perspectives of the instructors. This section is premised on the assumption that, if students are to understand the interaction of socio-cultural and ecological systems, they must be familiar with some of the basic principles of both the social sciences (to understand the "socio-cultural" side of the equation) and the natural sciences (to understand the "ecological" side). This course is designed to do that, drawing from biology, geography, sociology, philosophy, political science, economics and related disciplines, to provide a holistic perspective on people and the environment.

Upon completion of the course, students are expected to be sufficiently familiar with important contemporary environmental problems to be able to understand how the environment is being affected, why these environmental impacts are deemed problematic, and what can be done to solve these problems. Solutions will be approached from the perspective that conservation is politics and that, even through inaction, we all inevitably end up taking sides on questions about how much the environment is degraded and how that degradation is distributed between different social groups, generations and geographical regions. It is hoped that this course will serve as a guide for students to make responsible choices on such matters.

**II. Readings**

There are two required text books:

1. *Understanding Our Environment: an introduction*, by William P. Cunningham (Wm. C. Brown, 1994).
2. *People, Penguins and Plastic Trees: basic issues in environmental ethics*, edited by Christine Pierce and Donald VanDeVeer (Wadsworth, 1995, second edition).

There is a student study guide that accompanies *Understanding Our Environment*, which is available in the bookstores as an optional purchase.

A few additional readings may occasionally be assigned from handouts or items placed on reserve in the main library, at the assigned readings desk. (Reserved library books and articles may be checked out for two hours, if during the day, or overnight, if checked out after 9:00 PM.)

**III. Discussion Sections**

One of the distinctive features of this section of ISS 310 is its emphasis on active learning in weekly discussion sections. Instead of being limited to four lectures per week in a large lecture hall with 150 students, the professor (with the financial support of the College of Social Science and the Geography Department) has modified the printed schedule as follows: There will be only three lectures (Monday, Tuesday and Wednesday) plus one discussion section, to be held in place of the Friday lecture (*i.e.* from 11:30 to 12:20). All students will participate in one of four discussion sections, which will be conducted simultaneously each Friday by four teaching assistants, in four different rooms (116, 140 & 304 Natural Science Building plus 100 Berkey Hall). Activities within the discussion sections will

include clarification of materials in assigned readings and lectures, reviews in preparation for the midterm and final examinations, small group projects and presentations, debates and quizzes. During the first week of class, students will be divided into discussion sections in which they will remain for the duration of the semester. The teaching assistants responsible for discussion sections, the locations of their offices, and their office phone numbers are as follows (office hours to be announced):

Steve Cameron  
124 Natural Science  
355-7718

Linda Erickson  
144 Natural Science  
353-9940

Beth Myers  
144 Natural Science  
353-9940

Jennifer Maxwell Stefanacci  
144 Natural Science  
353-9940

Participation in discussions is a very important dimension of this course. It is well known that learning is significantly enhanced when the student takes an active part in her or his own education. (This is not to mention the sad fact that large lecture courses are notoriously impersonal and often quite tiresome.) When a professor stands on a platform in front of hundreds of students, the implicit assumption is that she or he is the giver of all knowledge while the students are the passive recipients. The professor and TAs for this course don't buy that. We start from the assumption that every one of you has strong feelings about some current environmental problems and that each one of you has important knowledge and perspectives on these problems. One of the principal purposes of the discussion sections is to allow us to share that knowledge with each other to a far greater extent than would be possible in a large lecture format. Other important objectives are to challenge students to think critically, to develop the cooperative problem-solving skills needed in the "real world" beyond undergraduate school, and to maximize interest in and enthusiasm for solving the critical environmental problems we all must face.

#### **IV. Requirements and Grades**

The total course score will be based on a curve and weighed as follows: discussion section grade 40%, midterm exam 20%, final exam 40%.

The discussion section grade will be based upon attendance and participation, performance in quizzes and grades in assigned projects. (Your TA will provide detailed information on the activities and requirements for your discussion section.) The midterm exam will be given during the lecture period on Wednesday, March 1. The final exam is scheduled for Wednesday, May 3, from 12:45 to 2:45 PM. It will be cumulative, drawing from the required readings and from all information presented and discussed in class. The midterm and final exams will consist of true-false, multiple choice, short answer and essay questions. More details on the content and design of the exams will be provided in time to assist with student preparations.

#### **V. Lecture and Reading Schedule**

Lecture topics and required readings will be covered in the following order (as noted above, a few additional readings may occasionally be assigned):

### **SCHEDULE OF TOPICS**

	<u>Pages in</u> Pierce & VandeVeer	<u>Pages in</u> Cunningham
<b>I. Introduction: examining our own preconceptions and expectations</b>	1 - 20	1 - 23
<ul style="list-style-type: none"> <li>• <i>Environmental science and environmental ethics: how we understand our place in nature</i></li> <li>• <i>What do we perceive to be the most serious environmental problems of our time?</i></li> </ul>		

<ul style="list-style-type: none"> <li>• <i>What can we already identify as the causes and solutions for these problems?</i></li> <li>• <i>What do we hope to get out of this course?</i></li> </ul>		
<b>II. The nature of nature: how natural systems function</b>	21-63	280-288
<ul style="list-style-type: none"> <li>• <i>What are ecosystems and how do they work?</i></li> <li>• <i>Is there a balance of nature? If so, how does it work?</i></li> </ul>		
<b>III. Ecology and economy</b>	90 - 100	367-380 412-441
<ul style="list-style-type: none"> <li>• <i>Are natural and economic systems compatible?</i></li> <li>• <i>Can technology overcome environmental limits?</i></li> <li>• <i>How are environmental goods and environmental degradation distributed between social groups and generations?</i></li> </ul>		
<b>IV. Environmental degradation: causes, consequences and solutions</b>		
<ul style="list-style-type: none"> <li>• <i>Human population growth:</i> <ul style="list-style-type: none"> <li>• <i>Is it the number one problem?</i></li> <li>• <i>What can and is being done to limit population growth?</i></li> <li>• <i>Is starvation primarily the result of over population?</i></li> </ul> </li> <li>• <i>Soils: How and why are we "losing ground?"</i></li> <li>• <i>"Pests": How are we and how should we do battle with our natural competitors?</i></li> <li>• <i>Resource management</i></li> <li>• <i>Preservation of natural systems &amp; biological diversity</i></li> <li>• <i>Air &amp; Water systems and what we are doing to them</i></li> <li>• <i>Energy</i> <ul style="list-style-type: none"> <li>• <i>Fossil fuels</i></li> <li>• <i>Nuclear power</i></li> <li>• <i>Renewable energy</i></li> </ul> </li> <li>• <i>Solid, toxic and hazardous waste</i></li> <li>• <i>Sustainable living in our cities and towns</i></li> </ul>	64 - 89 134 - 159 160 - 204 205 - 247 248-274 112-132, 276-297 298 - 318	330-338 24-39, 139-42 339-358 39-44
<b>V. Action for the environment: political and personal options</b>	319 - 344	106-125 142-233 358-366 442-469
<ul style="list-style-type: none"> <li>• <i>The philosophical underpinnings for action: shallow, deep, social and feminist ecology</i></li> <li>• <i>Green lifestyles</i></li> <li>• <i>Green politics</i></li> </ul>		

\*\*\*\*\*

## COURSE OUTLINE

---

**Text**            Applied Finite Mathematics, by Chester Piascik

**Lecturer**      Lanette Poteete; office: A-531 Wells Hall; phone 353-0844

**Lectures**      Mo., We., Fr. 9:10-10:00 a.m., B-108 Wells Hall.

**Office Hours**   Mo., We., Fr. 10:30-11:30 a.m. and by appointment.  
Office hours are intended to help you clarify any procedural and other questions you may have; they are NOT to be used to go over the material covered while you were absent or to provide extensive help with homework problems. As office hours are often crowded, make sure to prepare your questions in advance.

**Recitations**    Tu. and Th., according to the Schedule of Classes.  
At recitations, your TA will be solving problems not assigned for homework but similar to those assigned; if you have questions concerning the homework problems, you must see one of the TAs during his/her help hours.

**Help Hours**    Each TA will have help hours. These hours will be announced during the first recitation as well as during lectures; you may use help hours of ANY TA. Help hours cannot be used as a substitute for lectures or recitations. When asking questions, be prepared to demonstrate your own attempts to answer them.

**Attendance**    You are expected to attend ALL lectures and ALL recitations. As this is a five credit-hour course; in order to succeed, you are expected to spend at least ten hours per week studying (not counting lectures and recitations).

**Calculator**    You need a graphing calculator. On lectures we shall cover the basics of Sharp EL 9200; if you get a different calculator, you will be responsible for learning how to use it. **YOU ARE FULLY RESPONSIBLE FOR HAVING A CALCULATOR FOR ALL EXAMS AND ALL QUIZZES, AND FOR KNOWING HOW TO USE IT.** If you forget to bring your calculator to an exam or if your calculator does not function properly, you will have to work without it.

**Homework**    On the sheet attached, you will find a day-by-day schedule of the course as well as a list of problems from the text that you are expected to solve on your own (solutions to most of them are at the end of the text). Solutions of those problems are not expected to be turned in. It is considered that you cannot complete the course successfully unless you fully understand and can solve AT LEAST the assigned homework problems.

**Exams**        You will have nine ten-minute quizzes, four fifty-minute exams, and the final three-hour exam (for dates see the day-by-day schedule). There will be no make-ups for either quizzes or fifty-minute exams; only extreme situations will allow a student to be excused from a quiz or a fifty-minute exam. Having three finals on the day of the final exam will excuse you from that exam; if such is the case, arrangements for the (common) make-up final exam must be made in A-212 Wells Hall.

**Grading**        Every quiz counts 10 points, every fifty-minute exam counts 50 points; the final exam counts 300 points. Grading scale for each of the quizzes and fifty-minute exams is:

90% to 100% - 4.0	73% to 78% - 2.5	55% to 59% - 1.0
85% to 89% - 3.5	65% to 72% - 2.0	0% to 54% - 0.0
79% to 84% - 3.0	60% to 64% - 1.5	

Grading scale for the final exam will be made AFTER the results of that exam are turned in.

**General Info** 1. Section R in the textbook is an algebra review. You MUST be fully familiar with the first 30 pages of this review; if you are not, you should consider dropping this course and taking a more appropriate course instead.

2. Before being returned to you, a random selection of graded exams will be copied.

3. If you are caught cheating, the minimal penalty will be a zero for the course.

**Important Dates** 1. Quizzes: Jan. 21; Jan. 28; Feb. 11; Feb. 18;  
Mar. 11; Mar. 18; Apr. 1; Apr. 8;  
Apr. 22

2. Fifty-minute exams: Feb. 4; Feb. 25  
Mar. 25; Apr. 15

3. Final Exam: May 4, 7:45-10:45 a.m. (locations will be announced.)

**NOTE. To ALL quizzes and ALL exams you must bring your student ID and one pictured ID (or only your student ID, if it is pictured); otherwise, your exam will be invalid.**

\*\*\*\*\*

MATH 110

Spring 2004

### DAY-BY-DAY SCHEDULE

The following is a **tentative** day-by-day schedule of the course. Although no sections will be added to the course, if it turns to be necessary a section or two might be omitted; if that happens, an announcement will be made.

Jan. 13	1.1	Mar. 10	5.7
Jan. 15	1.2	Mar. 12	6.1
Jan. 18	1.3	Mar. 15	6.2
Jan. 20	1.4	Mar. 17	6.3
Jan. 22	2.1	Mar. 19	7.1
Jan. 25	2.2	Mar. 22	7.2
Jan. 27	2.3	Mar. 24	7.3
Jan. 28	2.4	Mar. 26	8.1
Feb. 1	3.1	Mar. 29	8.2
Feb. 3	3.2	Mar. 31	8.2
Feb. 5	3.2	Apr. 2	8.3
Feb. 8	3.3	Apr. 5	8.3, 8.4
Feb. 10	4.2	Apr. 7	8.4
Feb. 12	4.2	Apr. 9	8.5
Feb. 15	4.2	Apr. 12	9.1
Feb. 17	5.1	Apr. 14	9.2
Feb. 19	5.2	Apr. 16	9.3
Feb. 22	5.3	Apr. 19	9.4
Feb. 24	5.4	Apr. 21	9.5
Feb. 26	5.5	Apr. 23	9.6
Mar. 8	5.6	Apr. 26	Review
		Apr. 28	Review

If you miss a lecture, you are responsible for getting notes from one of the other students. Under no circumstances can you expect a lecture to be repeated for you.

Each quiz will cover the material from the previous two or three lectures.

Unless it is announced differently at the lectures, the one-hour exams will cover the following:

Exam 1: Ch. 1; Ch. 2

Exam 2: Ch. 3; Ch. 4

Exam 3: Ch. 5; Ch. 6

Exam 4: Ch. 7; Ch. 8

Final exam will cover the entire course (including chap. 9).

**Keep in mind that March 9 is the last day to drop the course with no grade.**

MATH 110

SPRING 2004

### HOMEWORK ASSIGNMENTS

---

The following list includes a MINIMAL set of problems you must solve on your own and fully understand in order to get a reasonably good grade. To get the top grade, you might have to solve some or all of the problems that are on this list.

- 1.1 1,3,5,6,7,9,11-17 all,19,21,23,27,29,30,31
- 1.2 1-9 odd, 13-23 odd, 29-47 odd, 58-61 all, 63,65,67
- 1.3 1-21 odd
- 1.4 1-17 odd, 21,25,29-45 odd, 46,47
- 2.1 1-39 odd, 40-43 all
- 2.2 1-51 odd
- 2.3 1-17 odd, 23-31 odd
- 2.4 1,3,5,7,8,11-21 odd
- 3.1 1-71 odd
- 3.2 1-9 all, 11-99 odd, 101-109 odd
- 3.3 1-9 odd
- 4.1 1-49 odd
- 4.2 1-43 odd, 47,49,53-75 odd
- 5.1 1-21 odd,25,31,33,34
- 5.2 1-23 odd, 27-35 odd, 39,43,45
- 5.3 1-21 odd
- 5.4 1-77 odd
- 5.5 1,3,7-47 odd, 55-67 odd
- 5.6 1-23 odd, 24,25,26
- 5.7 1-29 odd
- 6.1 1-25 odd,26-32 all
- 6.2 1-17 odd,25,26,27,29,33
- 6.3 1-19 odd
- 7.1 1-9 odd
- 7.2 1,2,3-31 odd
- 7.3 1-19 odd
- 8.1 1-83 odd
- 8.2 1-23 odd, 27,29,31,43,49,53,57,59,61,62,63,65,67,69,77,80,81,83

8.3 1,2,5-11 all, 13-19 all, 31,33,37,39,43,45,49,51,52,55,56,59,61,63,67,71-81 odd  
8.4 105 all, 9,14,17-36 odd, 37,41,43-50 all  
8.5 1-11 odd, 12-24 all  
9.1 1-15 odd  
9.2 1-25 odd, 29,31  
9.3 1-19 odd,12  
9.4 1-23 all, 35,37,39  
9.5 1-45 odd  
9.6 1-21 odd

PHL 200  
(Sections 1, 2)  
INTRODUCTION TO PHILOSOPHY

Instructor

Martin Benjamin  
514 South Kedzie Hall  
353-4617 (messages: 355-4490)  
Office Hours: T Th 2:30-4:00  
4:00, Th. 12:30-1:30, and  
by appointment

Teaching Assistant

Vanessa Tanaka  
540 South Kedzie Hall  
353-8860  
Office Hours: W 3:00-and by  
appointment

TEXTS:

Required

Joel Feinberg, ed., Reason and Responsibility (RR)

Recommended

Thomas Nagel, What Does It All Mean (WM)

Zachary Seech, Writing Philosophy Papers

TENTATIVE SCHEDULE:

Jan. 12 Introduction

Jan. 14 Philosophical Argument ( I)  
Handout

-----  
Jan. 17 Philosophical Argument II and the Dilemma of Determinism  
Handout

Feinberg, RR, pp. 354-56

Nagel, WM, pp. 3-7, 47-58

Jan. 19 Determinism (I)

Feinberg, RR, pp. 357-58

Paul Holbach, "The Illusions of Free Will," RR, pp. 363-67

Jan. 21 Determinism (II)<sup>1</sup>

Arthur Schopenhauer, "Every Existence Presupposes an Essence," RR, pp. 368-70

-----  
Jan. 24 Compatibilism (I)

A. J. Ayer, "Freedom and Necessity," RR, 370-75

Jan. 26 Compatibilism (II)

Walter T. Stace, "The Problem of Free Will," RR, pp. 375-80

Jan. 28 (Metaphysical) Libertarianism (I)

Richard Taylor, "Freedom and Determinism," RR, pp. 380-86

-----  
Jan. 31 (Metaphysical) Libertarianism (II)

C. A. Campbell, "Has the Self 'Free Will'?" RR, pp. 386-96

Feb. 2 Praise, Blame, and Determinism (I)

Elizabeth L. Beardsley, "Determinism and Moral Perspectives," RR, pp. 397-405

Feb. 4 Praise, Blame, and Determinism (II)  
"Determinism and Moral Perspectives," RR, pp. 407-407

Elizabeth L. Beardsley,

---

<sup>1</sup> This class will include a brief quiz on the nature and assessment of elementary philosophical arguments.

- 
- Feb. 7 The Mind-body Problem: Origins  
 Feinberg, RR, pp. 262, 118-19  
 Rene Descartes, Meditations on First Philosophy, RR, pp. 125-133, 151-55  
 Nagel, WM, pp. 8-26
- Feb. 9 The Mind-Body Problem: an Overview  
 Nagel, WM, pp. 27-37  
 Feinberg, RR, pp. 263-64
- Feb. 11 Dualism and Materialism  
 Jerome Shaffer, "The Subject of Consciousness," RR, pp. 268-77, 280-81
- 
- Feb. 14 Philosophical Behaviorism  
 Paul M. Churchland, "Behaviorism, Materialism, and Functionalism," RR, pp. 290-91
- Feb. 16 Reductive Materialism (The Identity Theory)  
 Paul M. Churchland, "Behaviorism, . . .," RR, pp. 291-96
- Feb. 18 Eliminative Materialism  
 Paul M. Churchland, "Behaviorism, . . .," RR, pp. 296-300
- 
- Feb. 21 Functionalism  
 Paul M. Churchland, "Behaviorism, . . .," RR, pp. 300-304
- Feb. 23 Is the Mind a Computer Program? (I)<sup>2</sup>  
 John R. Searle, "Minds, Brains, and Programs," RR, pp. 304-307
- Feb. 25 Is the Mind a Computer Program? (II)  
 John R. Searle, "Minds, Brains, and Programs," RR, pp. 307-315
- 
- Feb. 28 Reason and Religious Belief: an Introduction  
 Feinberg, RR, pp. 2-4
- Mar. 2 The Ontological Argument  
 Saint Anselm, "The Ontological Argument," RR, pp. 6-7  
 William L. Rowe, "The Ontological Argument," RR, pp. 8-17
- Mar. 4 The Cosmological Argument  
 Saint Thomas Aquinas, "The Five Ways," RR, pp. 17-18  
 Samuel Clarke, "A Modern Formulation of the Cosmological Argument," RR, p. 19  
 William L. Rowe, "The Cosmological Argument," RR, pp. 20-27
- 
- Mar. 7-11 SPRING BREAK--NO CLASSES
- 
- Mar. 14 The Argument from Design  
 William Paley, "The Argument from Design," RR, pp. 28-32  
 David Hume, Dialogues Concerning Natural Religion, RR, pp. 38-40, 48-50  
 Stephen Jay Gould, "The Panda's Thumb" and "Senseless Signs of History," RR, pp. 33-38
- Mar. 16 The Problem of Evil (I)  
 David Hume, Dialogues Concerning Natural Religion, RR, pp. 59-69  
 Fyodor Dostoevsky, "Rebellion," RR, pp. 70-75
- Mar. 18 The Problem of Evil (II)  
 J. . Mackie, "Evil and Omnipotence," URRU, pp. 75-82
- 
- Mar. 21 The Problem of Evil (III)  
 Richard Swinburne, "The Problem of Evil," RR, pp. 83-92
- Mar. 23 Reason and Faith (I)  
 W. K. Clifford, "The Ethics of Belief," RR, pp. 93-96

---

<sup>2</sup>This class will include a videotape presentation.

- Blaise Pascal, "The Wager," RR, pp. 97-100
- Mar. 25 Reason and Faith (II)  
William James, "The Will to Believe," RR, pp. 109-116
- 
- Mar. 28 Ethics: The Challenge of Relativism  
Feinberg, RR, pp. 440-442  
Richard B. Brandt, "Relativism and Ultimate Disagreements about Ethical Principles," RR, pp. 449-51  
James Rachels, "The Challenge of Cultural Relativism," RR, pp. 452-58  
Bernard Williams, "Relativism," RR, pp. 459-61
- Mar. 30 Moral Motivation and Human Nature (I)  
Feinberg, RR, pp. 442-43  
Joel Feinberg, "Psychological Egoism," RR, pp. 461-72
- Apr. 1 Moral Motivation and Human Nature (II)  
Howard Kahane, "Making the World Safe for Reciprocity," RR, pp. 479-87
- 
- Apr. 4 Proposed Standards of Right Conduct: Utilitarianism (I)  
Feinberg, RR, pp. 443-445  
John Stuart Mill, Utilitarianism, RR, pp. 487-92  
Nagel, WM, pp. 59-75
- Apr. 6 Proposed Standards of Right Conduct: Utilitarianism (II)  
John Stuart Mill, Utilitarianism, RR, pp. 492-99
- Apr. 8 Proposed Standards of Right Conduct: Utilitarianism (III)  
Peter Singer, "Famine, Affluence, and Morality," RR, pp. 499-506
- 
- Apr. 11 Proposed Standards of Right Conduct: Ethical Egoism  
Ayn Rand, "The Ethics of Emergencies," RR, pp. 506-510  
James Rachels, "Ethical Egoism," RR, pp. 510-17
- Apr. 13 Proposed Standards of Right Conduct: Kantianism (I)  
Immanuel Kant, "The Categorical Imperative," RR, pp. 524-28
- Apr. 15 Proposed Standards of Right Conduct: Kantianism (II)  
Immanuel Kant, "The Categorical Imperative," RR, pp. 528-31
- 
- Apr. 18 Social and Political Philosophy: Just and Unjust Laws  
Martin Luther King, "Letter from Birmingham City Jail," RR, pp. 536-44
- Apr. 20 Social and Political Philosophy: Justice as Fairness (I)  
John Rawls, A Theory of Justice, RR, pp. 531-33  
Nagel, WM, pp. 76-86
- Apr. 22 Social and Political Philosophy: Justice as Fairness (II)  
John Rawls, A Theory of Justice, RR, pp. 534-536
- 
- Apr. 25 Social and Political Philosophy: Justice, Gender, and the Family  
Susan Moller Okin, Justice, Gender, and the Family, RR, pp. 545-557
- Apr. 27 Making Connections: The Fields and Interrelatedness of Philosophy
- Apr. 29 Making Connections: The Nature and Value of Philosophy
- 

## WRITTEN REQUIREMENTS

### 1 Short Papers

Short (3-5 page) papers will be assigned for Feb. 7, March 4, March 28, and April 22. Students must write the first paper and any two of the remaining three—for a total of three short papers. Specific topics will be distributed in class one week in advance of each due date.

Papers are due at the beginning of class. Late papers will be accepted without penalty only in very unusual circumstances and only if cleared with the instructor in advance. Late papers not authorized in

advance will have their overall grade lowered by 0.5 for each 12-hour period for which the paper is late. The clock starts ticking at the beginning of class on the date the paper is due.

2. Final Examination

The final examination is scheduled for Wednesday, May 4, 7:45-9:45 a.m. Students will be asked to answer three essay questions to be chosen on the day of the exam from a set of 10-12 essay questions distributed in class on April 20.

3. Reflections on Readings and Class Meetings

Five (5) very short (no more than one double-spaced page) papers will be due in class on alternate weeks beginning Jan. 24. A specific schedule will be distributed in class on Jan 19. In these papers students will respond to two questions:

(1) What, to your mind, is the most interesting or important unanswered question raised in or by the previous class meeting--and why?

(2) What, to your mind, is the most interesting or important point raised in or by the assigned reading for today's class--and why?

These papers are due at the beginning of class. They will be read, evaluated, and returned at the following class meeting. Late papers will be accepted only in very unusual circumstances and only if cleared with the instructor in advance.

4. Quiz

There will be a brief quiz on the nature and assessment of elementary philosophical arguments in class on January 21.

Grading

Each of the three short (3-5 page) papers will count 20 percent of the final grade, for a total of 60 percent. The final examination will count 30 percent. Each of the five (1 page) reflection papers will count 2 percent, for a total of 10 percent. The usual adjustments will be made in borderline cases for steady and unmistakable improvement in written work and informed, thoughtful, and fairly regular participation in class discussion. The student's grade on the brief quiz on philosophical arguments will also be used to resolve borderline cases.

Criteria employed in evaluating written work include the following:

1. How well does the author understand and appreciate the complexity of the problem(s) and issue(s) he or she is addressing? To what extent has the author made judicious use of the clearly relevant concepts, categories, distinctions, positions, arguments, etc. that have been included in course readings and that have been brought out in class and come up in discussion?
2. Is the paper or essay clearly written? Are its claims precise? Does it have an explicit overall direction? Would it be intelligible to another student at this level who is interested in the topic, but not enrolled in the course?
3. To what extent has the author identified the assumptions or presuppositions underlying his or her position? And to what extent is he or she aware of the possible difficulties with them?
4. Are the author's claims and positions accompanied by cogent arguments? Are claims and arguments provided in different parts of the paper or essay consistent with each other?
5. Has the author been fairly thorough? Can the reader think of some fairly obvious objection to the author's position, raised in class or in the readings, that he or she has not anticipated and addressed?

## TEACHING STRATEGIES AND METHODS

Whether we teach courses in mathematics, science, English, or forestry, one of our goals as instructors is to provide students with opportunities to become active, critical thinkers. Real learning is transformative, helping learners use *what* they learned to synthesize, evaluate, and accommodate new information into existing systems of knowledge, understanding, and belief.

There are notes in this guide that will help you think about different pedagogical strategies, but they are by no means comprehensive. After all, there are entire books written about facilitating effective discussions, presenting effective lectures, and incorporating active learning.

## INSTRUCTOR KNOWLEDGE

Effective teachers exhibit a breadth of knowledge, bring information together from a variety of sources, analyze concepts effectively, and stay up to date in their specialty.

You may or may not feel that you are fully prepared to teach the content you are assigned in your first TA role. Ideally, you will be assigned to a course in the area of your particular expertise, but you should still review material to refresh your memory, and you might try explaining it to someone else as a way of anticipating student questions and problems. After all, it takes an additional layer of understanding to convey complicated topics to novice learners, even in areas of your expertise.

Just how you present your knowledge will depend on your approach to teaching in general, but you can take advantage of the expertise you have over mere textbook presentations in several ways. Consider the following suggestions, and how they might apply to your teaching.

- Reveal your thought processes and share your thinking so that students get a sense of what it means to think like a psychologist or a chemist or an art historian. Socializing students to the norms of your discipline is an important part of their learning, and it is very helpful if you can show them that different disciplines approach topics in different ways.
- Discuss current topics and how they impact the topics you are covering in that course.

### Tips

Reveal your thought processes  
Discuss current developments  
Don't oversimplify/But be Clear &  
Concise  
Stay a week ahead  
Look up unanswered questions  
Evaluate what students have learned

- Be careful not to oversimplify. There is sometimes a tendency for TAs to summarize what students *need to know* from a course rather than invite them into the discipline and into academic inquiry as a process.
- Stay at least a week ahead of the students if you are teaching outside your specialty, but remember that you are not responsible for knowing all the answers or that you need not apologize for your lack of knowledge. You do not need to be the all-knowing authority, and it is a great lesson for students to see a teacher respond honestly, “I don’t actually know.” Instead, respond with a reply that talks through your thinking: “Well, I’m not sure about that. But I do know that X indicates this, and since X and Y are related in this way, I think it is safe to say that changing the Z input would alter the process in this way, yielding XYX result.” It’s okay not to know; better to admit it than present an authoritative, albeit wrong, answer.
- If you don’t know an answer, tell your students you will find out. Then find the answer and share your findings at the next class.
- Focus some time and attention on assessment: are you testing what you want students to learn? Have you designed good learning outcomes, and shared those with students?

Remember that you are not responsible for knowing all the answers. If you cannot answer a question or you have made an error, admit it, but tell your students where they may find the answer or offer to look it up—and then do it.

### **INTERACTING SUCCESSFULLY WITH STUDENTS**

Interactions with students can be some of the most rewarding aspects of teaching. Here are some suggestions to maximize your relationships with your students:

Create a comfortable atmosphere in which learning is enjoyable and where individuality and creativity are encouraged

- Remain approachable, keep office hours, and encourage students to see you during those hours. Don’t act annoyed if students come see you for help. Office hours can be scary for students, especially first-year students, so don’t confirm their fears that asking for help is a bad idea.
- Be open to student questions by observing students’ responses and sensing their confusions.

**Establishing Rapport**

- Create Comfortable Atmosphere
- Remain approachable
- Be open to questions
- Respond with respect
- Stimulate participation and discussion
- Convey enthusiasm

- Respond to their questions with respect, even if those questions seem irrelevant
- Stimulate class participation and discussion (see section on “Active Learning”)
- Share your enthusiasm for your subject! Move away from the chalkboard or podium, use eye contact and watch students’ expressions to show your concern for their learning. Try, using humor appropriate to the subject.

### **IN-CLASS COMMUNICATION TIPS**

Open communication is necessary to have a classroom conducive to learning. Good communication with your students will allow you to better assess and serve their needs. Misunderstanding, however, can occur. The following lists contain suggestions and questions for self-evaluation.

#### **TIPS SPECIFIC TO ITAS**

- When not sure how to interpret student comments, ask for a fuller explanation; when a remark seems strange or out-of-place, ask if the student is joking. Check with someone familiar with such language expressions to help you better understand what the student may have meant.
- Use some humor when having problems with language and ask students to help correct your word "bloopers."
- Remember that listening carefully to someone who speaks a little differently than one is used to can be tiring, especially when material is difficult.
- Take your time and speak a bit more slowly than you usually do.
- If unsure of the pronunciation of a word, write it on the board or overhead projector to help avoid confusion about the word.

#### **TIPS FOR ALL TAs**

- When students ask a question, start by stating the question back to them in the form of a question, "Are you asking whether the etiology of \_\_\_\_\_, is affected by \_\_\_\_\_?" Ask students to stop you, or correct your interpretation of the question if that is not what they indeed asked.
- Allow students to stop you when they fail to understand something in your lecture.
- Be careful of critical, negative comments. Offer specific suggestions for change, tactfully and constructively.

- To generate student interest, use personal stories, cartoons, popular culture, news, etc. to make the material more relevant to their lives and to show your own excitement about the subject.

### **GENERAL COMMUNICATION TIPS**

As you become more comfortable with speaking in your classes, or if you confront problems that might be rooted in miscommunication, you may want to spend more time thinking about how effectively you communicate with your students. Here are some questions to ask yourself, to promote self-reflection around communication styles.

- Are my speech habits conducive to good communication and maximum student learning?
- Do I make every effort to speak in an orderly, direct manner?
- Do I avoid the attitudes of prejudice and emotional bias in my classroom planning and speaking?
- Do I speak at a rate that makes for effective comprehension?
- Do I speak with the appropriate volume for the size of the room and the number of students?
- Do I use variety in vocal expression—pitch, rate, loudness, and quality?
- As part of my regular presentations, do I include examples and explanations suitable to the levels of language and experience of my students?
- When a student addresses me, do I listen fully and courteously to both thought and feeling?
- When misunderstandings occur, do I explore them further and check out both my and my students' assumptions?
- Do I respond fully to the student, with clear comments, using words, voice, gestures, and the like?
- Could some of the failures in the listening of my students be due to weaknesses in my speaking and/or listening habits?

### **COMMUNICATION AND OFFICE HOURS**

Office hours can be a powerful vehicle for learning if you strive to get a feel for your students' mindset, and in these one-on-one situations, you can pay extra attention to how you communicate with students. Students may approach your office feeling powerless, angry, and frustrated, or confused. You need to address their feelings first. The following guidelines will help you successfully negotiate with students during office hours:

**Be prepared for student frustrations and allow students to vent.** Do not let a student's anger, frustration, tone, etc. put you on the defensive. Student-instructor communication is not a competition. Avoid temptation to "show who is boss."

Agree with students that they have a right to their feelings and strive to work for a solution. Although you may not understand the intensity of the emotion expressed, do not let this gap inhibit your role as a teacher and problem solver. Simply accept where the student is coming from and attempt to separate the problem from the emotion expressed.

**Become an active listener.** Repeat and summarize a student's comments. Paraphrasing allows the student to gauge whether or not you have understood the complaint, and it helps both student and instructor to frame the problem to be addressed. This also allows you to filter out some of the emotion and guide the discussion.

**Practice the art of asking questions.** Use open-ended, leading questions with students. If the student says, "You graded my paper unfairly. I didn't even know what you wanted, anyway," resist the temptation to reply "Why didn't you ask me before you started writing?" Nothing is gained when you launch into a lecture on sliding academic standards and your personal obligation to reestablish integrity in the university. Instead, ask the student how he or she arrived at this conclusion. Should you have given more feedback? Were your comments clear? What did the student think was unfair about your evaluation? The student's answers to your questions will both give you information about the immediate problem, and help you establish a picture of the student's mindset. Questions also help to separate issues. You could ask, for example, "Are you angry about the grade you received or about my comments on your paper?" The answer will help you work with the student toward specific solutions. Finally, in many cases asking questions diffuses student anger, because it shows the student that you are taking the concerns seriously.

**Take student perceptions seriously.** Try to eliminate statements like these from your conferences with students: "You are wrong," or "That is unreasonable," or "That is not rational," or "You are too emotional." Instead, accept students' perceptions and try to discover why they see things as they do. You might discover, for example, that students view education as a commodity: they pay their tuition, and they deserve a grade for it. Or they might believe that the time they spend preparing for a test or doing an assignment should ensure a particular good grade ("But I worked really hard on it," you may hear). You may see things very differently, but if these are the student's perceptions, you must discover and address them before you can hope to resolve any differences with the student.

**Propose multiple options to address student concerns.** Demonstrate your willingness to help the student address the conflict. Aim for a win-win solution. For example, if a student has done well on homework but has failed a test, you might suggest having that student pair up with another to study for tests, or come to your office for help before the test. Perhaps you need to advise the student on test-

taking skills—the student might experience test anxiety, which interferes with performance. Do not stress students' obligations to fix their own problem or accept the consequences.

**End the session with a plan of action.** After discussing options, reinforce the problem-solving nature of the meeting by creating specific agreements with specific actions expected on both sides. Students who leave with a plan in hand will feel validated and more open to future learning.

## **LECTURING AND OTHER LEARNING ACTIVITIES**

Ah, the lecture. Lecturing as a pedagogical tool has long dominated college classrooms, despite research which indicates that when students engage in active learning, they are able to construct meaning and knowledge in ways that are much more sustainable. Still, the lecture lives on. When you are thinking about what kinds of teaching approaches you will use to convey certain ideas, don't automatically think that a lecture is the best, or only, option.

### **Related TECHE Modules**

Lecturing 1  
Lecturing 2

<http://tap.msu.edu/teche/>

## **LECTURING**

Lecturing is probably the oldest teaching method and remains the most common form of instruction to be found in United States colleges and universities. As well as working to improve skills at lecturing, the instructor might also determine if the lecture approach is the best method of teaching for the achievement of the instructional goals of the class. Lecturing is very appropriate for some goals and very inappropriate for others.

### **Strengths of the Lecture Approach**

- Lectures can communicate the intrinsic interest of the subject matter. The speaker can convey personal enthusiasm in a way that no book or other media can. Enthusiasm stimulates interest, and interested, stimulated people tend to learn more.
- Lectures in university settings can provide students with role models of scholars in action. The professor's way of approaching knowledge can be demonstrated for students to emulate.
- Lectures can convey material otherwise unavailable, including original research or recent developments that have not yet made it to textbooks.

- Lectures can organize material in a special way. They may provide a faster, simpler method of presenting information to an audience with its own special needs. Lectures are particularly useful for students who read poorly or who are unable to organize print material.
- Lectures can convey large amounts of factual material. Instructors often cling to their lectures because of a fear that they won't be able to cover all of the information they need to share, unless they lecture on it.
- Lectures can speak to many listeners at the same time.
- Lectures permit maximum teacher control. The instructor chooses what material to cover, at what pace, whether to answer questions, and other courses of action.
- Lectures present minimum threat to students. They are not required to do anything, which they may prefer (but this also means that they may spend this time online, doing non-course-related things).
- Lectures emphasize learning by listening, an advantage for students who learn well this way.
- As Eble (1976) noted, lecturing beats textbooks or video in that it offers "face-to face confrontations with other talking, gesturing, thinking, feeling humans."

### **Weaknesses of the Lecture Approach**

- The lecture puts students in a passive rather than an active role. Passivity can hinder learning.
- Lectures inhibit feedback to both the instructor and the student about the students' learning, encouraging one-way communication.
- Lectures require an effective speaker who can vary tone, pitch, and pace of delivery. Lecturers must be verbally fluent; a skill that is neither stressed nor learned in many Ph. D. programs and is, in general, distributed unevenly among people.
- Lectures place the burden of organizing and synthesizing content solely on the lecturer. They are not well suited to higher levels of learning such as application, analysis, and synthesis.
- Lectures are not well suited to complex, detailed, or abstract material. Such topics require students to grapple, try, fail, and keep trying until they are able to master the material.
- Lectures assume that all students are learning at the same pace and at the same level of understanding, which is hardly ever the case.
- Lectures do not sustain student attention. Though students who wish to spend time online instead of paying attention prefer lectures, since they're not expected to do anything.
- Lectures tend to be forgotten quickly.

## **TEACHING WITH PROPS, VISUAL AIDS, AND COMPUTER TECHNOLOGY**

Including technology in your classroom can be as simple as making overheads or calling IMC and/or ITV to include a film or voice recording. It can be as complex as interactive video and hypermedia. The level of sophistication depends on many factors: your familiarity with the technology, instructional needs, availability of equipment, etc., and your department. This section is designed not to explain how to use technical equipment in the classroom but instead to encourage you to access and assess the different mediums to your fullest instructional advantage.

### **BLACKBOARD USE**

Think about your experiences as a student. How many times have you looked up in class after being distracted or after losing the main thread of the lesson only to be greeted by a meaningless, randomly distributed set of symbols or facts on the blackboard? How often, after getting home have you found your notes so meaningless that it is not even clear what subject was discussed? If the answer to either question is never, either you learned to take good notes or you have a fantastic memory. The fact is, many students' notes are an exact copy of what appeared on the blackboard, with few additional qualifiers, explanations, etc. If you are skeptical, ask to see your students' notes right after class. You will be amazed that many will not differ in even a single word. If you keep this in mind, you are part way to more effective blackboard use. When we do a problem at the board, students not only see the solution, but they see how we organize a solution. Effective board work highlights and emphasizes this organization and provides the students with a valuable model for writing, and often for doing, problems. The result of the board work accompanying a unit of the lesson should be an outline of what transpired. If you are solving a problem, an outline of the problem should remain at the end. The hypotheses, main points, and conclusion should be isolated, boxed off, or otherwise emphasized. Even the best students will occasionally lose the thread of a lesson or forget the original objective of a discussion. The blackboard is their major, and often their only, resource for reentering the lesson.

The following tips should help you structure your board work:

1. **Start with a clean board.** Board work from the previous class is distracting.
2. **Be organized.** Use headings. Before using the board, determine the major elements of your presentation. Consider how you could place them on the board for logical visual as well as verbal presentation. Keep diagrams near their written descriptions and label carefully. When solving equations, show each step in a logical sequence and mark major steps and answers.
3. **Be neat.** Print if at all possible—medium size. If you write too large, you will not have enough room. If you write too small, no one will be able to read it.

4. **Try not to work with eraser in hand.** Teachers who simplify expressions as they go along by erasing are anathema to students trying to take notes. Put a single line through expression you wish to simplify and write the new expressions above.
5. **Avoid talking to the board.** After you write on the board, turn to face your students before speaking. A good pattern to develop is to state the topic first, turn and write the topic name on the board, then turn back to the students and discuss the topic. When appropriate, add key points under the topic name.
6. **Avoid blocking the board.** Once you have finished writing, stand to one side while you discuss what you have written.

At the end of your class, take a moment to stand in the back of the classroom and examine the board. Can you reconstruct your lecture from what is written? Could students read your writing? Are diagrams labeled? If so, you are developing good board-work skills.

#### **PREPARING VISUAL AIDS<sup>5</sup>**

The use of overheads, graphs, charts, can be a note-taking guide and a timesaving aid if they are used in the most effective way. However, putting an overhead on the screen accompanied by the following comments "I know you cannot see this, BUT. . ." is cause for anger and frustration. In order to serve your students well, keep in mind the following tips:

1. The "Rule of 7'2"—Overheads and slides should be limited to:
  - 7 words per line
  - 7 lines per visual aid
2. 18-24 point font size
3. Cartoons: Good idea, but do they illustrate a point?
4. Graphs, charts and tables from books? Blow them up!
5. Leave material you have placed on the overhead in view until students have had a chance to examine it.
6. Face students. The only time you should look at the screen is to check focusing, visibility and placement of materials. Move away from the overheads whenever possible and avoid blocking the light.
7. Get confirmation from students. Can they see everything? Did they have time to copy important steps?
8. When writing notes or highlighting overheads, use projector pens and write legibly, perhaps using different colors to illustrate different points.

On a final note, remember that visual aids, such as charts and graphs, should be used to illustrate or demonstrate a point in the lecture/discussion. The important

---

<sup>5</sup>This section of the handbook was adapted from "Preparation and Delivery of Presentations," a workshop offered on behalf of TAP by Dr. Christopher B. Reznich, Office of Medical Education and Research, MSU, September 29, 1993.

concept being demonstrated by a visual aid may be readily apparent to you, but it is not always so for your students. On the other hand, do not simply read the chart to students. Instead, interact with it, reminding students what it demonstrates at different points.

## **ELECTRONIC INFORMATION AT MSU**

### **Email Interactions with Students**

Email is an excellent way to handle questions that might not normally merit office hour time, or to handle more detailed questions, if the TA so desires. Additionally, email is a way to foster out-of-class communication. Some courses, particularly in Integrative Studies, require email interaction. But no matter how you use it, email can be a powerful tool for your classroom. Be prepared for students, however, to not be active users of their MSU email address; explain to them if you plan to use MSU email as a primary source of communication.

### **Instructional Software Collection (Main Library, Room E208).**

If you would like to find out what kinds of instructional software are available for classroom use, check out the Instructional Software Collection in the Main Library. The Instructional Software Collection houses demonstration copies of hundreds of software packages and videodiscs for graduate and undergraduate course work, curriculum development, and research. Programs cover all subject areas and include computer-aided instruction, models and simulations, tutorials and drill and practice packages. Programs may be checked out for three days by faculty or graduate students, or run on equipment in room E208 of the Main Library (call for hours). For further information on the Instructional Software Collection phone 355-1840.

### **CD-ROM Databases: Main Library and Selected Branch Libraries.**

CD-ROM (Compact Disk-Read Only Memory) is a storage technology that allows vast amounts of information to be stored and searched on a microcomputer. CD-ROMs are available to be searched at no charge, and downloading results is possible on most systems. The databases contain millions of references to journal articles, books, government documents, research reports, newspaper articles, and other publications. Students can use it to download information for research projects. You can use it to prepare lectures. For more information on CD-ROM Databases, call Main Library Information/Referral, 353-8700 or access Gopher.

### **Computing Resource Center (Room 305, Computer Center).**

CRC resources include on-site access to Information System for Advanced Academic Computing (ISAAC) and the Computer Select Monthly CD-ROM disc by Computer Library. ISAAC provides information about IBM-PC compatible software and hardware for higher education instruction and research. The Computer Select CD-

ROM database contains 70,000 articles and abstracts from more than 140 leading computer publications, including reviews, evaluations, and computer manufacture specifications. For a more complete description of its services, see Appendix A.

### **Technology Classrooms**

Several classrooms across campus have been designated technology classrooms. These classrooms are equipped with various technologies to enhance teaching. Included in the rooms is a high-powered projector, computer with Ethernet connection, Zip drive, VCR, lighting controls, presentation software, and in some a flatbed scanner. Contact IMC for more information at 353-3960.

### **The World Wide Web**

As we all are well aware, the World Wide Web has taken our culture by storm. A very important part of the World Wide Web is educational. A variety of Web sites dedicated to education exist, some associated with organizations, some with centers, and others owned by individuals. Our students browse the web on a daily basis. So one of the most powerful tools an instructor can use is a class Web page. A brief search of faculty Web pages will reveal plenty of examples. Things one should include on a course web page are a syllabus, list of texts, assignments, sample work, and links to useful resources. Avoid intense graphics, since many of your students may be dialing in from home.

### **Chatrooms and Forums**

A very new resource, now available in The College of Arts and Letters, is the class Chatroom and Forum. Chatrooms are Web documents that students add to as they respond to other students. Students type their comments in a dialog box, press a submit button, and the chat discussion is updated with the student's comments. A forum is an organized chatroom. Students work in separate subject threads, responding to each other or starting new subject threads. An instructor can control threads by posing questions or topics when starting a thread. Both chatrooms and forums are password protected, so only students enrolled in the course can view comments. Password protection is important for posting copyrighted materials. TAs can copy items from the Web or listserve lists directly into the chatroom or forum, and since the readership is limited to that class, this is not in violation of copyright.

## **BEYOND THE LECTURE: ACTIVE LEARNING, DISCUSSION, PROBLEM SOLVING, READING AND WRITING, AND COLLABORATIVE LEARNING<sup>6</sup>**

Active learning is an approach that views the student as an active participant in the learning process. It is in many instances a viable alternative to and complement of the lecture approach. This section will talk about ways instructors can engage students actively through integrating instructional strategies into a lecture or using them as stand-alone methods. The focus will be on speaking, writing, laboratory and clinical instruction, and other strategies for active engagement.

Related TECE Module

### **Making the Most of Discussion**

<http://tap.msu.edu/teche/>

### **LEADING EFFECTIVE DISCUSSIONS**

A highly effective way of promoting active engagement in learning is to provide opportunities for students to verbalize what they are learning in the classroom. Instructors are thus able to provide the feedback that is such an important part of the learning process at the time when it is most needed.

Discussion techniques are one way to get students to verbalize what they are learning, as well as provide instructors with a way to assess student learning and clarify complex ideas. Discussions can be invaluable for any of the following goals of instruction:

- To help students learn to think in ways that are particular to the discipline. How would a botanist (or engineer, or chemist) look at this problem?
- To help students identify, articulate, and evaluate the logic and evidence that forms the basis of their own and others' positions.
- To give students opportunities to formulate applications of principles.
- To help students identify, synthesize, and solve problems using information gained from readings, lectures, and or life experiences
- To use the resources of members of the group
- To gain acceptance for information or theories counter to previous beliefs of students
- To develop motivation for further learning
- To get prompt feedback on how well objectives are being attained

### **DEMONSTRATING PROBLEM SOLVING**

As a teacher, you are responsible for transmitting several levels of knowledge to your students. Sure you need to convey some basic information about a topic. But

---

<sup>6</sup>This section of the handbook has been modified and reprinted with permission from *Teaching at The Ohio State University: A Handbook*. Center for Teaching Excellence, Faculty and TA Development, The Ohio State University, Revised 2005, pp. 47-54.

you also need to convey how members of your discipline approach data and information. How does a new topic relate to other topics? How might a certain idea inform your field in one way, while another expert might look at that data differently? Helping students think like a “(insert your field here)” is part of excellent teaching, and helping them understand different perspectives on ideas, facts, or processes also helps them incorporate their new knowledge into existing thoughts and beliefs.

One common approach to achieve this is to demonstrate problem solving in your field. A little practice will help you decide which of the following techniques works best with your students the material to be covered in your class:

1. Demonstrate a problem’s solution by systematically explaining the rationale for every step in a solution. Why do you do this next, and where does that lead?
2. Ask members of the class to take the lead and explain how they perceive the problem, and how they might tackle it.
3. Divide the class into small groups (3 or 4) and have group members take turns in leading a discussion on solving the problem, after which you can check their solutions as you lead a whole-class discussion.

## **INSTRUCTIONAL STRATEGIES FOR ACTIVELY INVOLVING STUDENTS<sup>7</sup>**

### **Case Studies**

Very broadly defined, a case study is a teaching instrument that portrays a real life situation for student analysis. Case studies are used frequently in professional schools to enable students to develop their skills in analyzing situations and making sound decisions. Often, a prepared case can be used, but when new cases are developed, the instructor should focus on an important dilemma or issue, create enough detail for the students to comprehend the case, and choose a situation about which there is room for debate and several possible courses of action. Students are asked to read the case before class. During the class session, the instructor first makes sure that the students understand the details of the case, then leads them through an analysis of the problem and discussion of possible alternative courses of action. The instructor serves as discussion facilitator, probing for detail, support for arguments, evidence, etc.

### **Peer Learning**

Classes can be divided into groups of about five students with a mixture of more and less knowledgeable students in each group. The groups are given learning tasks that will require them to share knowledge and experiences. The task may be to answer some review questions, to pose some critical issues about a topic, to solve a problem, apply some principles, or create a product. If the groups are balanced well, the task is clearly outlined, and the allocated time is appropriate for the task, the group will engage in peer learning and increase their abilities to function in an interpersonal setting through the process. The instructor's role is to serve as designer by carefully structuring the groups and tasks and to serve as facilitator while the groups are working, helping with interpersonal or task-related problems as they arise.

### **Learning Cells**

Learning cells are a variety of peer-learning that can be used when it is important to have students verbalize what they have read. Reading assignments are given before class and part of class time is spent with students in pairs telling each other what they read. The students may have read the same material beforehand, in which case they are demonstrating their comprehension and recall and getting an opportunity to clarify their understanding with one another, or they may have been assigned different readings, in which case they can complement others' knowledge with some different information or perspectives.

---

<sup>7</sup>This section of the handbook has been modified and reprinted with permission from *Teaching at The Ohio State University: A Handbook*. Center for Teaching Excellence, Faculty and TA Development, The Ohio State University, Revised 2002, pp.60-61.

**Discovery Format**

In a discovery or inquiry format, the instructor sets up a novel situation, an interesting puzzle, or an open-ended question that students are asked to explore using their own creativity and resources. They may be asked to hypothesize, based on only partial information, on what building materials were used to construct an ancient building; they may be asked to construct a device for measuring something or making certain musical tones; or they may be asked to interview each other about what triggers depression in their lives. The instructor once again serves as designer of the activity, choosing activities that are likely to lead students to accomplish a learning goal, and as facilitator during the process, helping students to stay on course and to locate the resources they need. In the discovery format it is important for the instructor to stay as non-directive as possible so that students develop independence and personal excitement.

**Role Playing**

In many courses, role playing can be used to develop empathy, to enliven a historical, philosophical, or literary topic, or to provide a concrete enactment of an abstract topic. Volunteers are asked to portray certain roles and given sufficient information on the context to enable them to improvise dialogue and actions. In some classes, the instructors have attended class in the role of a character and have enlisted colleagues to join them in enacting a situation for the students. The class is asked to play the role of those in the situation as well, asking questions or engaging in dialogue in ways that would be appropriate for the setting.

**Class Debate**

Using a central aisle or a real or imaginary boundary to divide the class space in half, the instructor poses a debatable proposition and asks those who agree to sit in one section and those who disagree to sit in the other. (The instructor may also want to create a third section for those who are undecided.) The instructor then moderates, asking students from one section, then the other, to support their position. At set intervals of perhaps fifteen minutes, students are given the opportunity to move to another section, based on whether they have changed their positions through listening and participating in the debate. A variant on this theme is to have students argue for the opposite of their original positions by changing the section designations after the students have already chosen positions. The instructor is responsible for setting up the proposition, enforcing the rules of the debate, and summarizing the discussion and results of the debate.

## **Simulations**

Simulations allow students to engage in learning activities that may otherwise be too time consuming, too expensive, or ethically questionable (requiring animals or intervention into human behavior). Using an established game or computer software or creating a scenario, the instructor develops a simulated environment within which students will engage in activity directed toward a learning goal. They may be asked to set up companies and create mergers; they may be asked to develop marketing packages that they will present to a real or simulated client; they may be blind folded to experience sightlessness; or they may be required to recreate a military battle or other historical event using a new strategy. The role of the instructor is to identify and preview established simulations for use in the course or to create scenarios that are likely to engage students in experiential learning directed toward a course goal. During the simulation, the instructor serves as a facilitator.

## **Summary**

The particular learning strategies and activities that are selected for engaging students actively will depend on the context of the specific course and student preparation with which the strategies are employed. Given the variety of strategies available, however, there are ways to pervade every course with opportunities for students to become actively involved in learning during class time. In addition to increasing motivation and providing feedback at crucial points, strategies that engage students help to develop the competencies of reading, speaking, writing, critical thinking, and problem solving that are marks of the well-educated person.

## **COLLABORATIVE LEARNING**

Collaborative learning can be described as learning that occurs because of interactions between members of a collective (meaning two or more individuals). In classrooms, learning-related tasks we are most familiar with are laboratory groups in science classes where pairs of students work together to carry out an experiment, although in many cases, this does not represent true collaboration, but rather compartmentalization of work (individuals do not have a complete understanding of all concepts involved because there has been an inequitable distribution of effort, in which one student does most of the work). A critical component of cooperative learning is division of labor by consent, within-group explanations, and sharing of information in equitable ways. Another critical prerequisite for success is the setting up of rewards for both the group and for individuals within the group; that is, each student must feel as though his or her contribution to the group and their individual contributions will be rewarded.

What might this look like when enacted in your classroom? Let us say, for example, that you are teaching a large lecture course in organismal biology. You might divide the class into groups of 4-5 and provide them with one of the topics or concepts that you will be dealing with in the coming weeks. Each group's job is to provide the rest of the class with an overview of that topic or concept in whatever form they would like. The conditions which must be met are the following: first, each group member must participate; second, the presentation or product must reveal the contribution of each group member; third, grading will consist of a group grade, as well as individual grades, the latter being based on a written product each group member turns in and which reflects their own contribution to the final presentation or product.

What does this do for you? It allows you to structure the way a topic is introduced to the class and to link topics or concepts across the semester. Second, it provides students with additional investment in the course. Third, particularly in large classes, it allows students to get to know well at least some other students taking the course. You can choose to alter the groups as the semester progresses, but it is critical to allow students the opportunity periodically to let you know privately how they perceive things in their group are going. Cooperative learning strategies can be extended to homework assignments and other performance assessments (e.g., tests) in which you allow students to work in these groups on particular questions. Again, it is probably wise to include questions that must be answered individually on a test as well. Cooperative learning also can be used in the writing process, where students meet regularly in groups to develop a research proposal. Here they can develop ideas and shape their writing via peer editing and several other group-based strategies.

### **READING AND STUDYING TO CONSTRUCT MEANING**

Many entering students, as well as faculty of these students, have identified *reading and studying to construct meaning* as activities requiring skills that are often underdeveloped or non-existent. In fact, many students have never really learned how to approach demanding reading and studying tasks at all. While it is clearly not the identified task of the instructor to include these strategies as part of a class, there are many ways an instructor can help entering students learn to cope with the sheer volume of academic reading and studying that college work demands. Most inexperienced students do not really know how to read text, no matter what form this text might take. Undergraduates tend to approach text in a linear fashion: sentence by sentence, straight through from beginning to end. Many students are completely unaware of alternative strategies and therefore stand to benefit enormously by being exposed to a more effective model.

### **The Mini-Lecture on a Reading and Studying Model**

Giving a mini-lecture on reading and studying for meaning is one way to ensure that all the students in your class have strategies for learning content, irrespective of their educational background. Using text from assigned reading, it is possible to model the reading and studying process with students; reading material out loud is an effective way to learn a great deal about how the members of a class think. There are as many ways to present strategies as there are instructors. One choice might be to model the process in its entirety, preferably at the beginning of the term. Another might be to present parts of the process and apply these strategies to different types of text, revisiting the process several times during the term. Still another might include presenting parts of the process as often as student performance indicates there is a need. At the very least, it should be possible to present a quick overview of the organization of various kinds of texts: how to use a table of contents, an index, a glossary, references, and how to identify the main points. No matter what choice you make, knowledge of these strategies can serve as a resource for both you and your students.

The following suggestions are simply that - suggestions. There are many theories about reading and studying. The following collection of strategies is based on brain-based teaching and represents a combination of some effective ways to approach complex text. It is included here in a form that could serve as a handout to be used by students as a guide for reading and constructing meaning.

### **A Reading-Studying Process**

#### **Overview (Preread) the Content**

Why the Overview?

- To gain a "big picture" of the material to be studied (how much? how difficult?)
- To discover the basic structure of the material and identify major concepts
- To increase understanding when the material is read in depth
- To identify the author's purpose for writing the material

How do you overview the content?

- Identify the Chapter heads and Sub-Heads
- Create an "advance organizer" (empty outline) of the structure, based on the Chapter heads and sub-heads
- Skim the pictures, graphs, and charts
- Look over the essential terms and vocabulary
- Read the end-of-chapter Summaries
- Read the end-of-chapter Questions

**A Reading-Studying Process**  
**Overview (Preread) the Content**  
**Chunk the Content**  
**Look for Patterns**  
**Reorganize the Content**  
**Summarize the Content**

## Chunk the Content

### Why Chunk the Content?

- To put large quantities or complex text information into manageable groups
- To increase the ability to store and retrieve information
- To learn well the *first time* and thereby minimize forgetting
- To develop a process for classifying material
- How do you chunk content?
- Divide text into smaller related sections (or paragraphs)
- Stop after each chunk and take notes—write the important concepts, list supporting ideas, and mark vocabulary for later study (in pencil)

## Look for Organizational Patterns

### Why Organizational Patterns?

- To provide a structure for sorting out information
- To put information into categories to make relationships between information stand out
- To help clarify the author's purpose for writing the text:
  - is the author stating facts?
  - is the author biased?
  - how do the ideas presented fit with the ideas of others?
- How do you find organizational patterns?
- Look for Closed (numbered) Lists - these lists usually identify important steps or characteristics. [For example, "there are *six* characteristics of ...."]
- Look for Organizational Patterns

Some Common Organization Patterns	Signal Words
Cause - Effect	All, none, clearly, conclusively, it appears, it seems, contributing to, seems to be a link
Problem - Solution	Problem, question, issue, solution, answer, findings, explanation, plan, proposal
Comparison - Contrast	<i>Comparison</i> - And, also, like, similar, resembling, much the same, comparable <i>Contrast</i> - But, however, yet, on the one hand, different from, opposite, conversely
Sequence of Events	Events in <i>chronological order</i> (dates) or a Process ( <i>sequence of steps</i> ) First, second, third, now, later, after, often, 1945, 1978, Steps 1, 2, and 3
Spatial - Geographic	Visualize <i>parts of an organism</i> or location of places <i>external, upper, lower, anterior, posterior</i> above, below, next to, between, inward...

<b>Thesis - Support</b>	Thesis (Point of View) Support (Facts/Details) Thesis, hypothesis, my belief that, it is theorized that, the idea is supported by...
<b>Definition</b>	Definition, term, general category, examples, characteristics, features
<b>Descriptive</b>	Recreates experiences through use of details and sensory language

### **Reorganize the Content**

Why Reorganize Content?

- To rephrase and order the content in the reader's own words
- To recognize larger meaning and patterns of relationship
- To "map" or create a "picture" to increase retention
- To link new information with information you already have

How do you reorganize content?

- Use the Organization Patterns to create relevant categories for the text. (For example, if the primary organizational pattern is *Problem - Solution*, the main category might *present* the problem, and the subcategories might be various *possibilities for solutions*. Or, if the primary organizational pattern is *Definition (of an organism's behaviors)*, subcategories might be *reproduction, group behavior, defense mechanisms, etc.*)
- Represent the larger categories and supporting ideas with a graphic organizer (For example: charts, outlines, trees, diagrams, pictures, maps, grids, etc.)

### **Summarize the Content**

Why Summarize Content?

- To enhance concentration on the content
- To integrate information into a coherent piece of writing making appropriate use of key words, phrases, and topic sentences.
- To lead to deeper comprehension - it is the *process* of separating important ideas from less important ones that promotes deep meaning

How do you construct a summary?

- If you have constructed a graphic organizer (in Step Four above), use the main ideas and major details to form a written summary. State these ideas clearly and do *not* include unnecessary detail.
- Integrate the information using keywords, phrases, and topic sentences you create.
- Write another draft if needed.

### **Beyond Summarizing - Incorporate Several Texts into a Longer Argument**

Why a Longer Argument?

To use information as part of a developed argument

To synthesize various sources

To integrate information with other material

To challenge and revise information in relation to other sources, including personal experiences and knowledge

See the Handbook section entitled "Incorporating Writing in Instruction" for specific suggestions for the development of writing skills.

## **INCORPORATING WRITING IN INSTRUCTION<sup>8</sup>**

Recently, writing has been recognized as an important vehicle through which people not only communicate ideas but also generate them. Writing, then, can be used as an inherent part of learning, creating occasions for students to fit new information into their existing knowledge structure and to expand their ways of thinking. The importance of writing in the thinking process implies that writing should occur in courses throughout the curriculum, a belief that is implicit in the new curriculum revisions at MSU and elsewhere. The development of writing skills has been recognized as an essential accomplishment of a college graduate for which all instructors, not only those in English departments, have responsibility.

Many instructors, believing that they have not had specialized training in the teaching of writing, are uneasy about the role they are being asked to play. They are also reluctant to add the grading of great amounts of written work to their existing workload. Fortunately, experts in the field are able to provide reassurance on both counts. The emphasis on writing as process stresses the role of the instructor as a facilitator of the thinking process rather than as "guardian of the semicolon," the technical expert on points of grammar. Suggestions for setting and responding to writing assignments in ways that engage students without creating excessive burdens on the instructor are also available. They revolve around two main thoughts:

**Writing assignments need not be formal or lengthy.** Writing as a medium for actively engaging students in learning can be used as a tool for discovery and understanding in an ongoing way that is integral to course activities; for example, an instructor might ask students to take a minute to write down their ideas before they respond to a question posed in class. The instructor might ask the students to write a short summary of what they learned in class or any questions that they still have about the material after class. Good writing assignments are meaningful, related to the goals of the course, clearly defined, and practical for both student and instructor.

---

<sup>8</sup>This section of the handbook has been modified and reprinted with permission from *Teaching at The Ohio State University: A Handbook*. Center for Teaching Excellence, Faculty and TA Development, The Ohio State University, Revised 2002, pp. 54-56.

**Not all written work needs to be graded.** In fact, instructors who set only formal written assignments to be graded perpetuate the notion that writing is only an end product of learning, rather than a tool to be used in the process. Writing can be incorporated into the class to serve several different functions, including a feedback and class management tool for the instructor; a way of having students reflect back on their learning, themselves, and their audience; and a means of sharpening students' written skills.

As a feedback device, the instructor can employ an anonymous one-minute reaction paper at the end of class or after a particularly intense discussion to solicit input and to test for understanding. The results can be reported back to the class at the next session and/or incorporated into the course design.

Journals can help students reflect back on unresolved questions and conflicts raised for them in class, and they can assist students to see how they have grown during the life of the course. These journals can also serve to personalize the classroom learning if they are turned in periodically or midterm for instructor comment or response.

Finally, writing can help students see issues from diverse perspectives by stretching them to write with the perspective of the "other" in mind.

To incorporate writing as an integral part of the learning process, instructors can suggest a variety of ways in which students can write as the course progresses. Ways that have been used effectively across courses include:

### **Reading Journals**

Instructors can suggest that students keep journals to chronicle their understanding of texts that they are reading for class. Students can be encouraged to write entries that reflect the main idea of the reading, major points that are covered, and the questions that they have after reading the text. To increase the level of cognitive activity involved in the reading assignments, instructors can suggest that students write about possible applications of the ideas, ways in which the material fits with other course readings and information, and their critical evaluations of the merit of the ideas or readings. Instructors may elect to review these journals periodically, reacting to points that they find particularly interesting, or they may view the journals as personal aids to scholarship for the use of the students alone.

### **Learning Logs**

Learning logs are a specific kind of reading journal in which students are asked to structure their reading responses in dual columns in their notebooks. Students are asked to divide a paper in half, to list key concepts in the left half as they read the text, and to write their responses to the concepts in the right half, continuing the process through the text. Learning logs help students become more aware of text

organization, more ready to participate in class discussion, and more capable of formulating ideas for their own writing.

### **The Précis**

Instructors can ask students to write a very brief summary of the major points of a reading assignment or class session. Often, they may wish to specify a certain word limit, such as 25 words, in order to stretch students' language skills and cause further reflection on the material. Once again, these may be collected—they may serve as an attendance check or to motivate students to keep up with their reading—or they may be used only to help focus a discussion or for the students' personal use. When collected, they may be graded very quickly. Elaborate comments do not have to be given if the précis paragraphs are viewed as formative documents.

### **Brainstorming/Freewriting**

Instructors can ask students to jot down ideas very quickly in response to a given problem or stimulus. They should be encouraged to focus on generating ideas rather than worrying about the format that their writing takes. Brainstorming can be used before the introduction of new material to enhance discovery and curiosity. Instructors can ask students to guess the causes of a historical phenomenon before these are discussed in class; they may ask students to predict the results of a scientific experiment before it is demonstrated. The lists that result can be shared in groups or in class before the material is formally discussed. Brainstorming and freewriting can also be used as effective summarizing techniques. Students may be asked to compose "laundry lists" of things to remember when diagnosing a certain virus or characteristics of abstract art. They can compare lists.

### **Inkshedding**

Students are asked to spend a few minutes writing in response to a particular question related to a reading assignment in the course. Then, students exchange papers and read the other person's comment, continuing this exchange for several papers. The instructor then asks students to report on what they found out or on what patterns they saw in the papers they read as the basis for a discussion. This strategy allows students to participate in a class discussion by building on the accumulating knowledge from reading other people's responses. It helps students share information and knowledge in a non-threatening way and to discover in the process similar and different interpretations of the material that will increase their own understanding of the issue being discussed.

### **Written Conversation**

The instructor asks students to list at the top of a blank sheet of paper one question they would like to have discussed related to the reading assignment for the day. Students read each other's questions and write responses to them, passing them on for further comment from other class members. Students are encouraged to

respond not only to the original question but also to other class members' responses to that question so that a written conversation begins to emerge. This strategy is useful in helping students understand the nature of the questions that other students have, and it provides a means of responding in a non-threatening way to a wide range of questions and issues that increase opportunities for critical thought.

### **Papers**

Although the formal term paper can be a valuable learning activity for many courses, some instructors who once gave their students long research papers are discovering that assigning one or more five-page papers, usually requiring some sort of analysis of ideas or readings, is easier to evaluate and more useful for their students' learning. To focus students' work, it is helpful to pose direct question—e.g., "What problems do sociologists encounter in defining 'deviance'?"— and convey as clearly as possible the instructor's expectations concerning the appropriate style and tone of the writing, the desired length, and the kind of documentation required. Exemplary papers from past offerings of the course can be made available for students to refer to. If the assignment calls for prescribed format, such as a laboratory report, an outline of the format or examples of good lab reports will help the students. Students may also be encouraged to look in scholarly journals in the discipline for examples of writing to use as models. When longer papers are assigned, instructors have found that requiring drafts in advance of the final paper helps students to pace themselves better and gives the instructor a chance to provide direction while the ideas are still in process so that the resulting final papers are of higher quality. Drafts also give instructors the opportunity to note stylistic and grammatical problems for students to correct so that they learn about writing while they are engaged in a specific revision task, rather than in the abstract.

## **INSTRUCTING RECITATION AND LAB SECTIONS**

Though some of you will have considerable responsibility for your own course, many of you will be instructing one or more sections offered in conjunction with a large lecture course. In this section of the handbook, we attempt to anticipate your specific concerns and give you suggestions for conducting effective sections.

### **Teaching Assistants and Laboratory Assignments**

If you are assigned to teaching a laboratory, you will likely have multiple roles as a teacher. Therefore, most of the other material in this Handbook is applicable! You need only be creative in applying it. In fact, your assignment may be more challenging, but with more opportunities, than a single discussion session or recitation, or even a lecture only course, because you will likely be combining the skills of lecture, leading a discussion, demonstrating techniques, as well as helping students learn how to conduct experiments, interpret results and prepare lab reports. Others of you will have the additional challenges of organizing and leading field trips.

No matter what the specific lab assignment, you will be responsible for helping students to acquire basic knowledge in the discipline and, often, to augment the knowledge learned in the lecture part of the course. Students will also learn methods of scientific investigation that may include any or all of the following: planning, executing, analyzing, and interpreting experiments. Lab techniques, operation of equipment, and/or field methods may all be a part of your assignment. In addition, you may need to conduct a “dry run” before your lab section to ensure that all equipment is working properly. Here, other TAs in prior sections may be very helpful in pointing out difficulties and things to watch for.

Finally, of course, helping the students to learn critical thinking and problem-solving skills as well as to learn to communicate their knowledge through exams and lab reports (written or oral) are all activities that are often part of the laboratory TA assignment.

Nyquist and Wulff (1996) point out an important difference between laboratories and other forms of teaching such as lecture and leading discussions: labs are active learning experiences. A good laboratory TA will work toward achieving a balance between telling students everything about an experiment or field location and letting students discover information for themselves. It may take a little longer to encourage students to learn for themselves, but the lesson is apt to stick with them longer and be more exciting and stimulating, even if the experiment doesn't work correctly every time.

Nyquist and Wulff recommend using the technique of asking questions in order to elicit student interest and discovery: What is happening here? What do you observe about this experiment, or this field site? Have you seen this before? What else have you learned about in lecture or past labs that might help explain your observations? What other experiments might you design to gather further information?

In most laboratories, it will be important to provide careful instructions for the operation of equipment (including safety features) and for setting up and conducting experiments. You may have done the same operation a dozen times, but most the students in your section will find this a new experience. It will also be important to circulate through the lab to check on the progress of each student and/or group of students. Ask about their progress. Ask if they have any questions or want to know more. Check the equipment or experiment yourself. Laboratory sections are active; you should be, too.

A final word about safety: If your department or faculty member in charge of the course or the TAs does not talk about safety, ASK! It is important that you know the procedures for chemical and biological hazards, as well as for radioactive compounds, if these are part of the assignment. Know where the Material Safety

Data Sheets are stored in the lab, or be able to access them via the web. Insist that students know and use the equipment that is provided for their safety (and yours). The best way is for you to be a good example. Yes, safety glasses may look goofy, and gloves may be time consuming to put on and take off, but both are important to protect the students. Uninterested and/or cavalier students may present the greatest risk to themselves and to other students. It is vitally important that you use your position of responsibility and authority to make sure that the lab is a safe environment where everyone can learn. Students who refuse to cooperate with safety instructions should be reported promptly to the faculty member in charge or the department chair.

If you are leading a field trip, do you know where to go or call for help, if needed? Do you know first aid? Excellent laboratory safety information is available from the Office of Radiation, Chemical, and Biological Safety.

### **Working with the Instructor of Record**

The professor of record may have very definite expectations about how you should instruct your session. This professor might even give you an instructor syllabus, which you are expected to follow, which includes problems to solve, instructional goals, etc. On the other hand, the professor may expect you to develop the agenda/materials to complement the class. In order to plan your semester, it is important that you meet with the professor to ask specific questions about the course, grading procedures, and your responsibility in lecture and in sections. The following is a list of questions you may want to approach the instructor of record with before the class starts:

Will you be expected to solve problems and answer questions about the lecture in sections?

Should you develop a section syllabus?

Will you be expected to supplement the lectures with entirely new material?

Will you have any lecture responsibilities in addition to leading your section?

Will you design your own tests or read and grade tests written by the professor?

Will you read term papers?

Will you tutor students who need help beyond what you would normally offer during office hours?

How does the professor want issues of conflict handled?

Some professors hold weekly meetings with their TAs during the semester to discuss problems and plan strategies and assignments for the coming week. Others wait for you to approach them with questions or problems.

### **Lectures and Textbooks**

It is generally expected that you will attend the professor's lecture unless informed otherwise. This allows you to know what it is you are supplementing and clarifying for the students. Even when you know the subject thoroughly, you will be unprepared for sections unless you know which problems were covered in class, the professor's approach, etc.

Listening from a student's perspective will help you understand why students feel overwhelmed, bored, or confused during lectures. Similarly, reading textbooks from a student's perspective will help you decide which topics need the most review. Some "introductory" texts were written for a tenth grade audience, while others will baffle even you. Read everything your students are expected to read; it is better to be baffled in your office than embarrassed in class. If, however, you are asked questions in section, which you are unable to answer be honest with students. Tell them you will check with the professor or you will consult a text and address the question in the next section.

### **Day-to-day Section Instruction**

There are many ways to approach section instruction, depending on the information you gather from the professor of record. If you are given an open-ended assignment, you may want to consider the suggestions about problem solving given in the preceding section. Of general concern, however, is how well the students are interacting with the lecture material. This will indicate what you need to focus on in sections, if the professor does not already map out your section goals. If you find that students are having difficulty with the lecture materials and they are unable to complete the professor's section goals, you should inform the professor and see how he or she would like to proceed. The professor may choose to adjust the level of examinations and the pace of the course as necessary.

It is essential that you identify what needs to be covered and then choose an appropriate approach. Is the material suitable for a section lecture? A question and answer session? A discussion? Rather than repeating the professor's lecture, consider a new approach to the topic. Perhaps you need to break a large topic into smaller units, or design a problem-solving session that encourages students to both conceptualize the approach and use it.

If your chief responsibility is review, it is especially important to get comments on whether you are covering what students think they really need. It is impossible to review all the material from the lecture or the textbook in detail. You will have to choose between covering most of the material somewhat superficially or only representing parts in depth. Briefly reviewing all the important topics usually stimulates student questions.

### **Instructor Preparation**

The best way to prepare for labs is to conduct the experiment yourself with the students' lab manual in hand. You will discover whether the directions are clear and whether students have the skills necessary to complete the experiment. Jot down notes as you proceed so that you can tell students how long the experiment will take, clarify confusing passages, and demonstrate new or difficult procedures. If you know in advance what to expect, what problems students are likely to encounter and what questions they will ask, you will be able to make much better use of your time in the lab. It is important to make sure that you have enough beakers, stations, chemicals, etc., ready before the lab begins.

### **Safety**

Check with your department about university and national safety guidelines. Make sure students are aware of appropriate safety considerations and steps. Check to see that appropriate signage is posted in the lab.

### **Student Preparation**

In conjunction with the professor, devise some means to ensure that students are familiar with the lab before they come to class. Some instructors feel that grades on lab reports are incentive enough, while others require students to submit a statement of purposes and procedures or an explanation of what and how the experiment is relevant to the course.

### **Supervising the Experiment**

At the beginning of the lab, review the purposes and procedures of the experiment. You might deliver a brief lecture on how the experiment relates to current developments in the discipline, or you might discuss the students' statements of objectives. Ask for questions, clarify any ambiguities in the lab manual, and demonstrate special procedures now rather than interrupt the experiment later.

If both you and your students are well prepared, you will be free to perform your most important role, that of guiding the students' development. Try to talk with each student at least once during the experiment. Technical and procedural matters can be handled quickly in a few words of advice or a very brief demonstration, but your primary role is to help students master the steps of scientific inquiry—recognizing and stating a problem so that it can be explored, data collected, a hypothesis formed and tested, and a conclusion drawn.

Attempt to allow students to solve problems for themselves, perhaps by rephrasing the question and reminding them of a concept they have forgotten. However, you approach problem solving, refrain from giving outright answers or advice. If lab partners ask, "Why can't we get this to come out right?" try asking a series of

questions that leads them to discover the reasons for themselves rather than simply explaining why the experiment failed. Sometimes the reason will be relatively simple, but just as often the reason will be more substantial—a matter of timing, sequence, proportion or interpretation. Perhaps the student has the necessary data but has overlooked an important step in analyzing the results or is unable to synthesize a solution. It is very tempting to help students by saying, "Aha, I see where you went wrong," but unless you resist the temptation, they are likely to falter at the same stage in the next experiment. Students may become frustrated if they cannot get an easy answer out of you, but they will also learn more.

### **Selected Bibliography**

Allen, R. R., and Rueter, Theodore. *Teaching Assistant Strategies: An Introduction to College Teaching*. Dubuque, IA: Kendall/Hunt Publishing Company, 1990.

Bates, A. W., and Poole, Gary. *Effective Teaching with Technology in Higher Education: Foundations for success*. San Francisco: Jossey-Bass, 2003.

Blythe, Hall and Sweet, Charles. *It Works for Me: Shared Tips for Teaching*. Stillwater, OK: New Forums Press, 1998.

Boice, Robert. *First-Order Principles for College Teachers: Ten Basic Ways to Improve the Teaching Process*. Bolton, MA: Anker Publishing Company, 1996.

Brookfield, Stephen D. and Stephen Preskill. *Discussion As A Way of Teaching: Tools and Techniques for Creating Democratic Classrooms*. San Francisco, CA: Jossey-Bass, 1999.

Clark, Christopher M. *Thoughtful Teaching*. Teacher Development Series. London: Cassell, 1995.

Grasha, Anthony F. *Teaching With Style: A Practical Guide to Enhancing Learning by Understanding Teaching and Learning Styles*. Pittsburgh: Alliance, 1996.

Halpern, Diane F., and Associates. *Changing College Classrooms*. San Francisco: Jossey-Bass, 1994.

Lowman, Joseph. *Mastering the Techniques of Teaching*. San Francisco: Jossey-Bass, 1995.

Marincovich, Michele, Jack Prostko and Fredrick Stout, Eds. *The Professional Development of Graduate Teaching Assistants*. Bolton, MA: Anker Publishing Company, 1998.

McKeachie, Wilbert J., Nancy Chism, Robert Menges, Marilla Svinicki, Claire Ellen Weinstein. *Teaching Tips: A Guidebook for the Beginning College Teacher*, 8<sup>th</sup> ed. Lexington, MA: D. C. Heath and Company, 1994.

Miller, W. R., and Marie F. Miller. *Handbook for College Teaching*. Sautee-Nacoochee, GA: PineCrest Publications, 1997.

Newby, Timothy J. *Instructional Technology for Teaching and Learning: Designing Instruction, Integrating Computers, and Using Media*. Englewood Cliffs, NJ: Merrill, 1996.

Nilson, Linda B. *Teaching At Its Best: A Research-Based Resource for College Instructors*, 2<sup>nd</sup> Edition. Bolton, MA: Anker Publishing Company, 2003.

Roblyer, M. D. *Integrating Educational Technology into Teaching*. Upper Saddle River, NJ: Merrill, 1997.

*The Teaching Professor Newsletter*. ISSN 0892-2209. Madison, WI: Magna.

Weimer, Mary Ellen. *Learner-Centered Teaching: Five Key Changes To Practice*. San Francisco, CA: Jossey-Bass, 2002.

Yelon, Stephen L. *Powerful Principles of Instruction*. White Plains, NY: Longman Publishing, 1996.

## EVALUATING TEACHING & LEARNING

### TESTING

Occasionally, you will find yourself wondering whether your students are concerned more about the grades they obtain in your course than about how much they actually learn in it. Commonly, student grades are based on performances on a number of tests, quizzes, projects, etc. Keep in mind that, just as it is important to state course objectives clearly, it is also important to make clear how you will evaluate this performance.

#### General Tips About Testing

Do not consider your tests to be “one off” requirements that help you assign grades. Effective tests start with an overall effective course design, and should be integrated into your teaching. You should be able to explain (to yourself, at least!) why you gave a test when you did, why you tested which material, and why you used the kind of test questions you did.

Mixing types of items (multiple choice, true/false, essay) on a written exam or mixing types of exams (a performance component with a written component) is often advantageous, minimizing weaknesses connected with one kind of item or component or in students' test taking skills. This is also a strategy recommended to maximize academic integrity and minimize cheating.

Testing early in the term and considering discounting the first test if results are poor can also be helpful. Students often need a practice test to understand the format each instructor uses and to anticipate the best way to prepare for and take particular tests.

Frequent testing helps students to avoid getting behind, provides instructors with multiple sources of information to use in computing the final course grade (thus minimizing the effect of "bad days"), and gives students regular feedback.

It is important to test various topics in proportion to the emphasis they have been given in class. Students will expect this practice and will study with this expectation. Students often gripe about tests which cover material that was never discussed in class; if you do not feel a topic is important enough to talk about in class, why would you test on it?

Proofread written exams carefully and, when possible, have another person

#### Related TECHE Module

Grading and Giving  
Feedback

<http://tap.msu.edu/teche/>

#### Testing Tips

Test Early  
Test Often  
Use Various Test Types  
Proofread Exams

proofread them. Tiny mistakes, such as incorrectly numbering the responses, can cause problems later. Collation should also be checked carefully, since missing pages can cause trouble.

Instructors should be cautious about using tests written by others. Often, items developed by a previous instructor, a textbook publisher, etc., can save time, but they should be checked for accuracy and appropriateness for the given course. If you care enough to *give* a test (and expect your students to study for it), you should care enough to *write* the test yourself.

If enough test items are developed and kept out of circulation between tests, instructors can develop a test-item bank from which effective items can be reused on multiple versions or offerings of a test. Use this strategy judiciously to minimize the temptation for students to memorize old items.

Generally, on either a written or a performance test, try to avoid having separate items or tasks depend upon answers or skills required in previous items or tasks. Otherwise, a student's initial mistake will be perpetuated over the course of succeeding items or tasks, penalizing the student repeatedly for one error.

Instructors have found that using a little humor or placing less difficult items or tasks at the beginning of an exam can help students with test anxiety reduce their preliminary tension and thus provide a more accurate demonstration of their progress.

A good way to detect test errors in advance is by pilot testing the exam. Instructors can take the test themselves or ask colleagues and/or former students to comment on it.

Try to anticipate special considerations that learning disabled students or non-native speakers of English may need. The instructor needs to anticipate special needs in advance and decide whether students will be allowed the use of dictionaries, extra time, separate testing sites, or other special conditions.

### **Limited Choice versus Open-Ended Items**

Instructors often ask, "Are essay tests better than objective tests?" The answer, of course, depends on the circumstances and on the goals of the tests. The advantages and disadvantages of two main types of items are discussed below in terms of the various issues that will often be considered when a test is being developed.

The term "limited-choice" will be used here to describe test questions that require students to choose one or more given alternatives (multiple choice, true/false, matching columns), and "open-ended" will be used to refer to questions that require

students to formulate their own answers (sentence completion, short answer, essay). This avoids implying that one type of question is automatically "objective" and the other necessarily "subjective"—a faulty assumption. Following are some things to consider in deciding on types of test items.

### **Level of Learning**

In principle, both limited-choice and open-ended items can be used to test a wide range of learning objectives. In practice, most people find it easier to construct limited-choice items to test recall and comprehension and open-ended items to test higher-level learning objectives, but other possibilities exist. Limited-choice items that require students to do such things as classify statements as fact or opinion go beyond rote learning, and focused essay questions can easily stay at the recall level.

### **Content Coverage**

Since more limited-choice than open-ended items can be used in exams of the same length, it is possible to sample more broadly over a body of subject matter with limited-choice items. However, a small number of open-ended items that are broad in scope and call for the inclusion of many specifics can also test subject matter comprehensively.

### **Practice and Reward of Writing and Reading Skills**

A long-term goal of many learning tasks in higher education is the cultivation of students' reading and writing skills. Limited-choice items give virtually no writing practice, while open-ended exams, particularly short-answer and essay, provide opportunities to improve writing and practice writing to express often complicated ideas. Open-ended exams, therefore, give students with good writing skills an advantage over those who do not have these skills, and limited-choice exams do not favor students who write well. They do, however, favor students who read well, since these students have the skills to attend to keywords, recognize logical qualifications and cues, and discriminate among close choices.

### **Practice and Reward of Creativity and Divergent Thinking**

Open-ended items, especially essay questions, can provide far more opportunity for creative or divergent thinking than limited-choice items, depending on how the item is written since an essay question can call for convergent thinking, such as reaching a set solution to a problem situation. An argument often made about limited-choice exams is that they fail to foster and actually penalize divergent or innovative thinking and reasoning.

### **Feedback to Teacher and Student**

Limited-choice exams allow faster feedback than open-ended exams. Open-ended exams, however, usually are more revealing to the teacher about specific student strengths and weaknesses in processes such as comprehension and reasoning and can occasion more dialogue if teacher and student use this possibility.

### **Reusability of Exam**

In general, exams consisting of a large number of limited-choice items are easier to reuse than those consisting of only a few essay questions, since it is harder in this case for students to remember and transmit the questions to others who will take the exam after them (if the printed exam does not get into circulation). If a large item bank is built and different exams can be randomly generated from the same pool of questions, limited-choice items are highly reusable.

### **Prevention of Cheating**

Limited-choice exams provide easier conditions for cheating than open-ended exams, since single letters or numbers are far easier to see or hear than extensive text. Cheating can be minimized in several ways, however, such as using alternative test forms and controlling where students sit during the exam.

### **WRITING TEST ITEMS**

In the discussion of limited-choice items below, the term *stem* is used to refer to the part of the item that asks the question. The terms *responses*, *choices*, and *alternatives* are used to refer to the parts of the item that will be used to answer the question. For example:

Stem:           Who is the author of Jane Eyre?

Responses:    A) Emily Bronte  
                  B) Charlotte Bronte  
                  C) Thomas Hardy  
                  D) None of the above

## Multiple-Choice Items

Multiple-choice items are considered to be among the most versatile of all item types. They can be used to test factual recall as well as level of understanding and ability to apply learning. Spending time reviewing questions can also be a great opportunity for learning, especially if the discussion addresses why the incorrect responses were wrong as well as why the correct responses were right. Unfortunately, multiple-choice items are difficult and time consuming to construct well. They may also appear too discriminating (picky) to students, especially when the alternatives are well constructed and are open to misinterpretation by students who read more into questions than is there.

Some guidelines can help you construct effective multiple-choice items:

- Use the stem to present the problem or question as clearly as possible.
- Use direct questions rather than incomplete statements for the stem.
- Include as much of the item as possible in the stem so alternatives can be kept brief.
- In testing for definitions, use the term in the stem rather than as an option.
- List alternatives on separate lines (rather than including the options as part of the stem) so that all options can be clearly distinguished.
- Keep all alternatives in a similar format (i.e., all phrases, all sentences, etc.).
- Make sure that all options are plausible responses to the stem. Poor alternatives should not be included just for the sake of having more options.
- Check to see that all choices are grammatically consistent with the stem.
- Try to make alternatives for an item approximately the same length. Making the correct response consistently longer is a common error.
- Use misconceptions students have indicated in class or errors commonly made by students in the class as the basis for incorrect alternatives.
- Use "all of the above" and "none of the above" sparingly, since these alternatives are often chosen because of incomplete knowledge.
- Use capital letters (A,B,C,D,E) as response signs rather than lower case letters ("a" gets confused with "d" and "c" with "e" if the type or duplication is poor).
- Try to write items with equal numbers of alternatives to avoid asking students to continually adjust to a new pattern caused by different numbers.
- Put the incomplete part of the sentence at the end rather than the beginning of the stem when using a statement rather than a direct question.
- Use negatively stated items sparingly. When they are used, it helps to underline or otherwise visually emphasize the negative word.
- Make sure that there is only one best or correct response to the stem.
- Keep the number of alternatives at five or less. The more alternatives used, the lower the probability of getting the correct answer by guessing. Beyond five alternatives, however, confusion and poor alternatives are likely.

- Randomly distribute correct responses among the alternative positions so that there are no discernible patterns to the answer sequence (ABBABBABB, etc.) and a nearly equal proportion of As, Bs, Cs, etc.

### **True/False Items**

True/false items are relatively easy to prepare since each item comes rather directly from the content. They offer the instructor the opportunity to write questions that cover more content than most other item types since students can respond to items quickly. They are easy to score accurately and quickly. True/false items, however, may not give an accurate estimate of the students' knowledge since half can be answered correctly by mere chance. They also offer little insight into student understanding about the material being tested, and are often considered to be unfairly "tricky" by students. Since true/false questions tend to be either extremely easy or extremely difficult, they do not discriminate between students of varying ability as well as other types of questions do.

Some guidelines can help you construct effective true/false items:

- Keep language as simple and clear as possible.
- Use a relatively large number of items—75 or more when the entire test is T/F).
- Avoid taking statements verbatim from the text.
- Be aware that extremely long or complicated statements will test reading skill rather than content knowledge.
- Require students to circle or underline a typed "T" or "F" rather than to fill in an "T" or "F" next to the statement, thus avoiding having to interpret confusing handwriting.
- Avoid the use of negatives, especially double negatives.
- Avoid ambiguous and trick items.
- Make sure that the statements used are entirely true or entirely false. Partially or marginally true or false statements create unnecessary ambiguity.
- Use certain key words sparingly since they tip students off to the correct answers. The words *all*, *always*, *never*, *every*, *none*, and *only* usually indicate a false statement, whereas the words *generally*, *sometimes*, *usually*, *maybe* and *often* are frequently used in true statements.
- Use precise terms, such as *50% of the time*, rather than less precise terms, such as *several*, *seldom*, or *frequently*.

## Matching Items

Matching items are generally quite brief and uninvolved and are especially suitable for *who*, *what*, *when*, and *where* questions. They can, however, be used to have students discriminate among and apply concepts. They permit efficient use of space when there are several similar types of information to be tested. They are easy to score accurately and quickly. Among the drawbacks of matching items are that they are difficult to use to measure learning beyond recognition of basic factual knowledge, they are usually poor for diagnosing student strengths and weaknesses, they are appropriate in only a limited number of situations, and they are difficult to construct since parallel information is required.

Some tips to help you construct effective matching items:

- Use only homogeneous material in a set of matching items (i.e., dates and places should not be in the same set).
- Use the more involved expressions in the stem and keeping the responses short and simple.
- Supply directions that clearly state the basis for the matching, indicating whether or not a response can be used more than once, and stating where the answer should be placed.
- Make sure that there are never multiple correct responses for one stem (although a response may be used as the correct answer for more than one stem).
- Avoid giving inadvertent grammatical clues to the correct response.
- Arrange items in the response column in some logical order—alphabetical, numerical, chronological—so that students can find them easily.
- Avoid breaking a set of items (stems and responses) over two pages.
- Use no more than 15 items in one set.
- Provide more responses than stems, to make process-of-elimination guessing less effective.
- Number each stem for ease in later discussions.
- Use capital letters for the response signs rather than lower-case letters.

## Completion Items

Completion items are especially useful in assessing mastery of information when a specific word or phrase is important to know and retain. They preclude the kind of guessing that is possible on limited-choice items since they require a definite response rather than simple recognition of the correct answer. Completion items, however, tend to test only rote, repetitive responses and may encourage a fragmented study style since memorization of bits and pieces will result in higher scores. They are more difficult to score than forced-choice items and scoring often must be done by the test writer since more than one answer may have to be

considered correct. In some ways, they have little advantage over other item types unless the need for specific recall is essential.

Some tips to help you construct effective completion items:

- Write new items instead of copying statements directly from the text.
- Provide clear and concise cues about the expected response in the statement.
- Use vocabulary and phrasing that comes from the text or class presentation.
- When possible, providing explicit directions as to what amount of variation will be accepted in the answers.
- Give more credit for completions than for T/F or matching items, since completion items require a mastery of vocabulary that is more sophisticated than T/F or matching items.
- Avoid using a long quote with multiple blanks to complete.
- Require only one word or phrase in each blank.
- Facilitate efficient scoring by having the students write their responses on lines arranged in a column to the left of the items.
- Ask students to fill in only important terms or expressions, with vocabulary that you really think is important to learn.
- Avoid providing grammatical clues to the correct answer by using a /an, etc., instead of specific modifiers.

### **Essay/Short Answer Items**

There are several advantages to using essay questions and short answer items to test student knowledge and understanding. These approaches encourage students to strive toward understanding a concept as an integrated whole, permit students to demonstrate achievement of such higher level objectives as analyzing given conditions and critical thinking, allow expression of both breadth and depth of learning, and encourage originality, creativity, and divergent thinking. Written items offer students the opportunity to use their own judgment, writing styles, and vocabularies. They are less time consuming to prepare than any other item type. Unfortunately, tests consisting only of written items permit only a limited sampling of content learning due to the time required for students to respond. Essay items are not efficient for assessing knowledge of basic facts and provide students more opportunity for bluffing and rambling, than limited-choice items. They favor students who possess good writing skills and neatness and are pitfalls for students who tend to go off on tangents or misunderstand the main point of the question. The main disadvantage, however, is that essay items are very difficult and time consuming to score and potentially subject to biased and unreliable scoring.

Effective practices for constructing essay questions include:

- Use novel problems or material whenever possible, but only if they relate to class learning.
- Make essay questions comprehensive rather than focused on small units of content.
- Provide clear directions as to the expectations.
- Allow students an appropriate amount of time. (It is helpful to give students some guidelines on how much time to use on each question, as well as the expected length and format of the response, such as full sentences, phrases only, outline, and so on.)
- Inform students, in advance of answering the questions, of the proportional value of each item in comparison to the total grade.
- Require students to demonstrate command of background information by asking them to provide supporting evidence for claims and assertions.

## **GRADING AND ASSESSMENT**

### **Determining and Explaining Criteria**

Students are sensitive to grades and often focus on how to get the best grade possible. Many times throughout your teaching career you will be asked questions like:

- "Will this be on the test?"
- "How much does a quiz count toward the final grade?"
- "Do you take attendance and participation into account when giving final grades?"
- "Will you grade on a curve?"
- "If I cannot make it to the test, how will that affect my grade?"

In order to avoid unnecessary problems, you must be able to answer these and similar questions on the first day of classes or, better yet, write them into your syllabus. This means that you need to decide in advance, and in many cases in conjunction with the instructor of record or your supervising instructor, what the answers are.

Many departments have policies on grading and issues related to grading. Before starting your first semester of teaching, you need to find out what those policies are and how much freedom (if any) you have to modify or amend them. It is particularly important to learn how many exams you are expected to give throughout a semester; if you can set exam dates yourself or if you must follow the departmental exam calendar; what activities other than exams (such as quizzes, term papers, essays, group projects, homework assignments and the like) you are expected to take into account when determining final grades; if make-up exams are allowed and, if so, when they must be given; under what conditions should you allow a student to

have more time for an exam or to take it away from the rest of the class; and if there are any special conditions concerning the final exam. Although some of these matters may seem trivial to you, if not resolved properly, they can cause problems later in the semester.

The single most important thing connected with grading is how the final grades will be assigned. To start with, you must know that **MSU has a numerical grading system in which grades are: 0.0, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0.** However, you should, in addition, find out if your particular department has a policy on a final grading scale that you must use. If so, find out all details, follow the policy closely, and do not make exceptions unless approved by a course supervisor.

To avoid confusion in applying MSU's numerical grading system, consult with your supervising faculty member prior to grading to determine what constitutes the acceptable range of responses and how the numerical grading system should be applied.

If your department has no policy concerning grading procedures and grading scale (if it allows instructors to define their own grading procedures and decide on their own grading scales), be sure to give careful consideration to all issues and potential problems associated with the act of assigning final grades. This section is meant to help you understand different options you have and make an informed decision.

### **Keeping Records<sup>9</sup>**

Keep accurate records of your evaluation of each student's performance throughout the semester. Some instructors keep the records on Angel, while others keep records elsewhere, such as a protected spreadsheet. Keep grades up-to-date. You should also keep your records for a while since students may come back later to question a grade, finish an incomplete, ask you to write a recommendation, or file a grievance. Such records will help you justify and/or reevaluate a student's final grade if necessary.

---

<sup>9</sup>"Keeping Records," "Determining Grades," "Testing your Tests," and "Forming and Discussing Criteria," have been modified and reprinted with permission from *Mentor: A Handbook for New Teaching Assistants* (Fifth Edition). Maren Halvorsen, Ed. Center for Instructional Development and Research, U of Washington, pp. 34-38.

## Determining Grades

Grading is a teaching activity that seems straightforward, but can actually be quite complex. Grades do not exist in a vacuum but are part of the instructional process and serve as a feedback loop between you and the student. Your grading policy should be consistent with your learning objectives. Your grading policy should figure into your decision about the type of material for which you test, the kinds of tests or assignments you give, and the degree of difficulty of those tests and assignments. It is particularly important to discuss grading standards and policies with your course supervisor or coordinator when you are planning your course, especially when devising exams, quizzes or assignments.

Whether or not you are the person responsible for assigning course grades, students will ask you about grading policies and criteria. In order to be prepared for such inquiries, ask yourself first whether your grading strategy is based on an independent judgment of each student's performance, or whether the grade will be based on the student's performance relative to other students in the class.

If you concentrate solely on quality, on the students' mastery of the material, you may find yourself awarding all 4.0s—if all students get over 90 on an examination, for example, or if they all demonstrate understanding of a given concept or methodology in an essay, paper or research project. If, on the other hand, they all get below 80, and if you have beforehand said "80 and above is a 3.0," then you are trapped into giving no 4.0s or 3.0s. There is nothing wrong with this **mastery-based grading** philosophy, provided you have asked yourself crucial questions about what you have tested for (see below, "Testing Your Tests") and why.

On the other hand, if you concentrate solely on distribution and **norm-referenced grading**, or grading on a curve (see below, "Grading on a Curve"), you are predetermining that a set percentage of students will receive a set grade, irrespective of the quality of their work (for example, deciding that one-third of the class will get 2.0s on the midterm, even if they correctly answer over 90% of the questions).

In most cases, grading seems to navigate between mastery-based, criteria-referenced grading ("4.0 work is 4.0 work, period") and norm-referenced grading, in which "4.0" work is entirely relative to the current class (deciding that the top five scores get 4.0s, for example). Everyone must make his or her own adjustments to the intricacies of grading, so don't be surprised if you change your philosophy and methodology throughout your teaching career.

If you are solely responsible for course grades and assign grades based on how students perform relative to other students, then look for natural breaks in your class's distribution as an easy way to make at least preliminary distinctions. If you

are evaluating essays or research papers, one very helpful way to proceed is to rank the papers before assigning any grades. Natural clusters often occur in such a process, and you also can get a better feel for your specific criteria by saying, "This one is better than this one because..."

If your grades are skewed at the high or low end, or are not in line with your colleagues, meet with the professor of record, your TA supervisor and other TAs to discuss what your questions or assignments are designed to evaluate. If you are using a criteria-based grading system, see if a consensus can be reached on what constitutes effective student work. Comparing grades on a set of essays can be one of the most productive ways of arriving at a common language and standard for assessment, thus preventing students from shopping around for sections or seeking out instructors who have a reputation for being "easy graders."

### **Grading on a Curve**

This is the process by which you divide a distribution of scores into groups of different sizes. In a normal (bell-shaped) curve the smallest groups occur on either end of the distribution, and are awarded 4.0s and 0.0s. The largest group is the middle group and those students are assigned 2.0s, while 1.0s and 3.0s are assigned to the next-largest groups.

Unless you are teaching a very large class, you shouldn't insist on, or expect, a bell-shaped distribution in your class. If you are part of a large class that is graded on a normal curve, it might be wise to say beforehand something like: "Typically, when we give tests like this, scores cluster in a normal distribution that looks something like this . . ." rather than saying "20% of you will get 1.5s," etc.

Students will often say to you: "This grade doesn't seem fair, can't you grade on the curve?" A good strategy for answering this is to ask students what they mean by "curve." Typically they don't mean a normal curve but, rather, are suggesting you attempt to "even out" the grades, to make the highest score a 4.0. If this is indeed what the students are implying, explain that they really don't want you to *curve the class* but simply *raise the grades*.

### **Forming and Discussing Criteria**

Grading is easier—and less likely to be contested—if you make the evaluation criteria for individual assignments clear from the beginning. Don't think that merely handing out your standards at the beginning of the semester will clarify things for the students. Be prepared to repeat them several times for reinforcement—out loud; on the board; in handouts, and, most importantly, integrated into each discussion of assignments and results. Ideally, in fact, your grading criteria should be implicit in everything you say in class; the ways you define and analyze problems and present evidence should model the very processes you want to see in student work.

Many student complaints arise from them feeling as though they have “been tricked,” either because an instructor was not clear about how an assignment or test would be evaluated, or because students were tested on material that was not emphasized in course (if you did not feel information was important enough to cover in class, why is it important enough to test?). Be straightforward in testing on the material you cover, and explaining how you will evaluate. Clear and consistent communication is essential not only for grading, but for all facets of teaching.

Crucial points about discussing grades with students follow:

1. Speak in terms of MSU’s 4.0 grading system. It can be cumbersome and confusing to translate percentages into MSU grades, or traditional “ABCD” grades to the 4.0 scale used here. After all, while students might equate a 4.0 with an “A” or a 3.0 with a “B,” what is a 3.5? An A-? A B+? It can be unnecessarily confusing.

2. Be consistent and equitable.

3. Make sure students know what types of questions will be asked, what types of evidence they will be expected to present, or what procedures they will be expected to follow. If practical, hand out sample questions ahead of time.

4. Make sure students understand why they are being tested on certain material—what is being measured, how it is being measured, and what the test has to do with course objectives. Are students being asked to recall information, recognize patterns or analogies, draw inferences, make connections, originate a thesis, or solve a problem?

5. When students ask to have a grade changed, or contest an answer, don't act hastily. Avoid spot judgments by scheduling a meeting for a few days later; it gives you a chance to review your grading notes, and a chance for students to calm down if they are upset. Research the issue, prepare a response and a rationale, and, if necessary, talk with the course supervisor or TA coordinator about it. If students are not satisfied with your response, refer them to the course supervisor or TA coordinator for a determination. Also, document your interactions with disgruntled students as promptly as possible, so you have accurate notes for later discussions.

### **Testing Your Tests**

Sometimes, your test results might surprise you. Perhaps students, as a group, did much worse than you expected. Or perhaps the grade distribution is surprising in

#### **Recommendations**

**Be consistent and equitable**  
**Inform students of what to expect on exams**  
**Inform students why tested topics are important**  
**Before deciding on requested grade changes allow a “cooling off” period**  
**TEST on what you TEACH!**

other ways. When this happens, consider the possibility that the test instrument may have not achieved what you hoped it might, and explore these questions.

**Did I test what I thought I was testing?** If you wanted to know whether students could apply a concept to a new situation, but mostly asked questions determining whether they could label parts or define terms, then you tested their memory rather than their ability to apply that memory.

**Did I test what I taught?** For example, your questions may have tested the students' understanding of surface features or procedures, while you had been lecturing on causation or relation—not so much what the name of the bones of the foot are, but how they work together when we walk.

**Did I test what I emphasized in class?** Make sure that you have asked a majority of the questions about the material you think is the most important, especially if you have emphasized it in class. Don't try to trip students up with questions on obscure material that are weighted the same as questions on crucial material.

**Is the material I tested really what I wanted students to learn?** For example, if you wanted students to use analytical skills such as the ability to recognize patterns or draw inferences, but only used true-false questions requiring non-inferential recall, you might try writing more complex true-false or multiple-choice questions.

### **Classroom Assessment Techniques (CATS)**

In addition to evaluating students for the purpose of assigning grades, it is also useful to continually assess the level of student comprehension of a particular subject. A quick method to determine the level at which students comprehend course material is through classroom assessment techniques (CAT). There is often a large discrepancy between instructor expectations of the students and what the students think is expected, and a CAT may call this to the instructor's attention as well as help the students become aware of the instructor's expectations and perhaps even achieve them. A major advantage of utilizing CATs is that you are able to assess learning immediately after the material has been provided, before the next exam, when it will become clearer in hindsight which topics were easier to understand based on your lectures/discussions.

One example of a CAT is to ask students to write the most important point you have discussed on a 3x5 index card or piece of paper after you have finished a particular concept. Hopefully the students will provide exactly the main topic that you have illustrated. However, some may record one of the minor points that you had intended to support the broader idea. This exercise will allow you to determine what topics the students are focusing on. It will provide the students a chance to stop and reflect on the material instead of just recording what you are saying, and furthermore it will give you a few minutes to gather your thoughts and prepare to

move on. Be sure to clarify exactly what you expect to be the best answer before you advance to the next topic, which will also help link the items that you are teaching.

There are several commonly used classroom assessment techniques. Sometimes instructors will spot check students in class, while others will ask each student to answer a single question on a piece of paper and turn it in at the end of the class. These typically don't require a great deal of time, but can yield extraordinary insights into student learning.

- “Reality check”: what was the most important point we discussed today/this week?
- Summarize what we just did.
- What was the clearest point/muddiest point about today's material?
- Why is this concept relevant?
- What is wrong with the following statement . . . ?
- Define a key term that has provided a focal point for today's discussion.
- Make a drawing/graph that illustrates or utilizes a concept.
- Draw a concept map linking up main ideas that you provide.
- Write a metaphor illustrating a concept that we have focused on today.
- Provide an example test question from the material you have covered today.

## **TEACHING ASSESSMENT AND PROFESSIONAL DEVELOPMENT**

Learning to accept and request feedback on, to assess criticism of, and to make modification in your teaching practice is an important and ongoing process in your professional development. Whether the evaluation process is externally mandated or self-initiated, teaching assessment always presents you with an opportunity to improve your practice. The first part of this section will suggest ways in which you might initiate this process and use feedback effectively. The remaining part of the section will examine ways to put that assessment and reflection process to work for you in the job market.

### **STARTING POINTS FOR REFLECTIVE PRACTICE**

Before moving to formal forums of evaluation, we suggest that you take a few minutes to jot down answers to the following questions or to record memorable and uncomfortable events in your teaching. This pre-writing on your experiences will help you to clarify your thoughts and will also prepare you with specific examples and instances you might use in job interviews or other situations where you are called upon to exemplify your practices.

- Recall a time when you had a wonderful educational experience. What does this suggest to you about teaching and learning that you might apply to your work?
- Recall a painful or difficult educational experience. What does this suggest about teaching and learning that you might apply to your work?
- Recall a time when you felt you did a terrific job of teaching someone. What made this such a positive experience? How might you encourage this to happen again?
- Recall a time when your teaching did not result in the desired learning. What went wrong between intention and performance? What does this suggest?
- Put yourself in your students' shoes. Imagine you are a student in your own class. Write some notes to yourself describing the educational experience you would like to have.

## **Forms of Evaluation**

In this section, we discuss external evaluations that inform your self-assessment and hopefully guide your professional development. The questions you have considered in the previous section should help you to solicit feedback and to determine how to respond to both positive and negative criticism.

### **Student Evaluations**

#### **Student Instructional Rating System Form (SIRS)**

MSU has developed a general instrument for student feedback, the SIRS Form. It is an anonymous survey that queries students about your preparedness, receptiveness to questions, lecturing, organization and the like. At the end of each semester, your department will provide you with either the SIRS form or their own evaluation sheet or both. If your department does not provide you with specific instructions about the process of distribution, you should check with your departmental office. Generally the instructor obtains the bubble sheets, cover sheet and a manila envelope from the department office, hands it out to the class, and solicits a student volunteer to return it to the department office. After you have turned in your grades, you can go to your department office and read your SIRS forms. This is a basic forum for student feedback. These forms are highly standardized, so the utility of this feedback varies widely, depending on instructor and on discipline. For example, students only fill out one SIRS form, which conflates a lecturer with a lab instructor and recitation leader.

#### **Departmental Evaluation Forms**

Several departments on campus have developed their own student evaluation forms, tailored to their own departments' concerns. Check with your department to see if they use the SIRS form, an alternative department form or both. Follow the procedure for collecting the evaluations outlined by your department when using its instrument.

#### **Instructor Developed Evaluations**

You can supplement the feedback you receive from the SIRS or Departmental evaluations by developing alternative evaluations. If you are assisting in a class, check with the instructor-of-record to see what kinds of evaluation he or she uses and whether or not the professor is open to you collecting some feedback of your own. Instructors can request written or verbal feedback. (Many times written feedback is less intimidating for students to provide.) You might have students evaluate you as part of an assignment or on a form you have generated.

Evaluations can serve many purposes. You can distribute them or request comments at any time during the semester. Early evaluation allows you something

the SIRS forms do not—it allows you to address issues specific to the course and students you are instructing now.

### **Evaluation by Your Department**

Each department has different policies concerning supervision and evaluation of teaching assistants. You should check with your department or supervising faculty member to find out what kind of evaluations will be done of your teaching performance. Beyond that, it is your right to request a faculty visit or a visit by another TA who can give you feedback. These visits and evaluations should be arranged with your department.

### **Using Evaluations to Improve Your Teaching**

All of the above-described forms of evaluations—self-reflection, student feedback and departmental evaluation—allow you to better assess your teaching and to make improvements in the future. Evaluation materials also lend themselves nicely to professional dossier construction and teaching portfolios, as described in the next section. A faculty member recently suggested that his preparation for tenure evaluation was enhanced because he maintained a collection of evaluations, which allowed him to periodically assess his role in the classroom, as a researcher, and as a member of MSU.

### **“Evaluating Learning and Teaching” Selected Bibliography**

Angelo, T. A., & Cross, K. P. *Classroom Assessment Techniques*, 2<sup>nd</sup> Ed. San Francisco: Jossey-Bass, 1993.

Banta, Trudy W., Jones, Elizabeth A., & Black, Karen. *Designing Effective Assessment: Principles and Profiles of Good Practice*. San Francisco, CA: Jossey-Bass, 2009.

Butler, Susan M., & McMunn, Nancy D. *A Teacher’s Guide to Classroom Assessment: Understanding and Using Assessment to Improve Student Learning*. San Francisco, Ca: Jossey-Bass, 2006.

Chism, N. V. N. *Peer Review of Teaching: A Sourcebook*. Bolton, MA: Anker Publishing Company, Inc., 1999.

FLAG: Field-Tested Learning Assessment Guide For Sciences, Mathematics, Engineering, and Technology (SMET). Visit this site: <http://www.wcer.wisc.edu/nise/cl1/flag/overview.htm>

Gronlund, N. E. *Assessment of Student Achievement*. New York: Allyn and Bacon, 1998.

Jacobs, L. C., & Chase, C. I. *Developing and Using Tests Effectively: A Guide For Faculty*. San Francisco, CA: Jossey-Bass, 1993.

Ory, John C., & Ryan, Katherine E. *Tips for Testing and Grading*. Newbury Park, CA: Sage Publications, 1993.

Seldin, Peter and Associates. *Changing Practices in Evaluating Teaching*. Bolton, MA: Anker Publishing Company, Inc., 1999.

Walvoord, B.E., & Anderson, J. *Effective Grading: A Tool for Learning Assessment*, 2<sup>nd</sup> Ed. San Francisco, CA: Jossey-Bass, 2010.

Zubizarreta, John. *The Learning Portfolio: Reflective Practice for Improving Students Learning*. Bolton, MA: Anker Publishing Company, 2004.

## WEB Sources on Plagiarism: How to Detect and Avoid It

- google.com – For suspicion about web plagiarism. Type quoted sentence into site. Duplicates will pop up automatically.
- Cizek, Gregory. Cheating on Tests: How to do it, detect it and prevent it. Chapel Hill: UNC Press, 1999. ISBN 0-8058-3145-2. (Paper, \$32.50)
- <http://newark.rutgers.edu/~ehrllich/plagiarism598.html> - Howard Ehrlich's resource on plagiarism. Available in Romanian.
- Shiraev & Boyd. The Accent of Success: A Practical Guide for International Students. Concerning international students and plagiarism.
- <http://www.rbs2.com/plag.htm>- Bob Standler's plagiarism resource, with duplication restrictions.
- <http://www.StThomasU.ca/~hunt/plagiary.htm> - From Russell A. Hunt, Professor of English, St. Thomas University (New Brunswick), this is an excellent piece entitled, "In Defense of Plagiarism," in which he discusses how plagiarism affects teaching.
- <http://www.princeton.edu/pr/pub/integrity/pages/plagiarism.html> - Princeton's excellent guide to plagiarism AND mentions specifically international students.
- <http://education.indiana.edu/~frick/plagiarism/> - IU's plagiarism assessment tool that reveals the "shifty" nature of plagiarism.
- <http://www.indiana.edu/~wts/pamphlets/plagiarism.pdf> - also at Indiana, a source to help students learn about the appropriate use of sources.
- <http://tlt.its.psu.edu/suggestions/cyberplag/> - A Penn State Resource for faculty and students, including a quiz to help students identify what constitutes plagiarism.
- <http://www.coastal.edu/library/presentations/papermil.html> - "Cheating 101: Paper Mills and You." Full text, also references to other articles, sites. Outstanding Resource.
- <http://www.ksu.edu/honor> - Kansas State University Honor & Integrity.
- <http://www.academicintegrity.org> - Center for Academic Integrity
- The Bedford Workshop on Plagiarism <http://bedfordstmartins.com/plagiarism/> Developed by Nick Carbone, The site includes classroom ready PDF handouts you can give your students, including the very popular "Straight Talk about Plagiarism" flyer. All resources on this site are FREE.
- <http://www.tss.uoguelph.ca/resources/onlineres/plagiarism.htm> - Canada's University of Guelph website. Includes research from Don McCabe, a leading authority on issues related to what students cheat.
- <http://www.stu.ca/~hunt/4reasons.htm> - Russ Hunt's piece describing why there are reasons to be happy that students cheat.
- Plagiarism: Plain Advice - Written by Dean Karen Klomparens, MSU Graduate School <http://grad.msu.edu/researchintegrity/>

## **MARKETING YOUR TEACHING CREDENTIALS/ TEACHING PORTFOLIOS**

We all know that research projects, publications, conference papers, fellowships, and awards are crucial measures of our achievement and are therefore noteworthy (read curriculum vitae worthy) accomplishments. There is another important professional dimension, however, that we often neglect. A good many TAs spend 20 hours a week in undergraduate education-related activities. Your tenure as a TA at MSU might span from serving as a grader for a large lecture course, to conducting lab/recitation sections, to acting as an autonomous instructor with the full responsibilities of a course. Why spotlight your teaching? First, because for many of us it is our largest commitment throughout a normal semester. Second, because teaching success is evidence of your participation in the profession. Third, teaching will probably be a major commitment in your academic career. If you learn to market these aspects of your professional efforts as well, you will strengthen your professional dossiers.

In "How to Land that First Teaching Job," Perlman, McFadden and McCann recommend that the future professoriate (TAs) give a great deal of consideration to marketing teaching experiences and ability (*APS Observer*, March 1994). They cite studies that suggest that teaching occupies "almost two-thirds (64%) of faculty work time." Search committees, many of whom are responding to increased attention given to higher education in state legislatures, are placing more emphasis on teaching. A list of the sponsors for "The Fifth National Conference on the Training and Employment of Graduate Teaching Assistants" (1995) indicates that the disciplines of Chemistry and Mathematics, as well as those within the humanities, social sciences, and natural sciences, are giving more consideration to teaching. A glance at your discipline's professional journals might confirm this trend.

Here at MSU, we have taken the traditional concept of a teaching portfolio and customized it into a professional development/marketing tool for TAs—a "teaching-full professional dossier." Some of you may have attended one of the TA workshops entitled "Start Now: Marketing Yourself via the Teaching Portfolio." For those of you who haven't and would like an opportunity to learn more about the portfolio as a marketing tool, keep on the lookout for a workshop flyer. Some variation of this workshop should be offered on a regular basis. In the interim, take a look at the summary of the teaching portfolio that follows and refer to the citations provided at the end of this handbook for further reading.

Now that you have given consideration to teaching assessment, you are ready to channel those evaluations into a strong curriculum vitae or teaching portfolio. The following section describes the portfolio proper as a collection of documents separate from your CV. Even as we discuss the component parts of a portfolio and the documents that might assist you to create one, we must admit that it is

somewhat unlikely that you will actually submit a hard copy of the portfolio to a search committee. (Although in some fields this is becoming an option.) Alternatively, we suggest that the teaching portfolio process is analogous to creating a windows menu for your computer or a filing system for your accomplishments. The process of reflecting and compiling offers several advantages apart from a portfolio to hand out to a committee. It allows you to develop a strategy for representing yourself as a professional. The actual compiled and organized documents allow you to compose a statement about yourself within your profession. As you consider what kind of statement this process tells you about yourself, you will be simultaneously preparing for the interview process. These documents and your production and consideration of them will help you to write persuasive letters of introduction, and most importantly, ones which will help you to position yourself within your field—to demonstrate in your letters, publications and interview answers that you are familiar with your pedagogy, methodology, and your relationship to other academics in your field as well as to scholars in other disciplines. In addition, this reflection and recording process will simplify your preparation for the application process and later for tenure review.

#### **BUILDING A TEACHING PORTFOLIO**

*by Volker Langeheine*

#### ***The Teaching Portfolio: Becoming a Professional Teacher***

Changes in the job market and a growing emphasis in academia on teaching have led us to taking teaching more seriously.

If you are considering a future career in teaching at the secondary level, at a 2-4 year college (quite often with a teaching load of up to 12 hours per week), teaching undergraduates, or at a major research institution, teaching undergraduates and graduates, you have to become a professional teacher. Building your teaching portfolio (or teaching dossier) is a key factor to reaching that goal.

#### **Becoming a Professional Teacher**

**Gain Teaching Experience**  
**Evaluate Teaching**  
**Document Teaching Experience**  
**Assemble a Teaching Portfolio**  
**Improve Teaching**

As a teaching assistant you are provided with many opportunities to gain teaching experience no matter to what extent you are involved in a course, for example as a grader for a large lecture class, a conductor of lab/recitation sections, or as an instructor with full responsibilities for a course. Do not hesitate to document your teaching experience in a teaching portfolio right from the start. By the time a job ad for a teaching position you want to apply for arrives, it might be too late to begin reflecting on your teaching and thinking about what to include in a portfolio.

***The Importance of Teaching Portfolios***

Teaching portfolios can be used by teaching assistants (as well as by faculty) to *document teaching experience*, and to *market teaching experience* when used as a tool in an application process. They can also be used for the personal development of the teacher (to *improve teaching*) or as part of an evaluation system (to *evaluate teaching*).

<b>Using the Teaching Portfolio in an Application Process</b>	
<i>Search Committee</i>	<i>Applicant</i>
<i>Job ad (usually applicants are asked to submit evidence of teaching effectiveness)</i>	<i>Prepares teaching portfolio Mails cover letter, curriculum vitae, letters of recommendation, teaching portfolio (if requested)</i>
Initial screening, eventually further requests	Mails writing samples, video with taped teaching practice, teaching portfolio (if requested)
Telephone interviews/ Conference interviews	Uses teaching portfolio as quick reference Writes thank-you letter
On-campus interviews for applicants on "short list"	Presents research Teaches a class Refers to teaching portfolio if needed Attends social events Writes thank-you letter
Job offer	Accepts/rejects/negotiates offer
<i>Contract</i>	<b><i>SIGNS CONTRACT</i></b>

Edgerton, Hutchings & Quinlan state that "portfolios can capture the intellectual substance and 'situated-ness' of teaching in ways that other methods of evaluation cannot" (4). They feel that "portfolios encourage faculty to take important, new roles in the documentation, observation, and review of teaching." They view

portfolios as “a particularly powerful tool to improvement” and are convinced that “portfolios can help forge a new campus culture of professionalism about teaching.”

### **What is a Teaching Portfolio?**

The teaching portfolio is a means to discuss what you do, or plan to do as a teacher, and then demonstrates this through supporting materials. It is a *representative sample* of your work as a teacher rather than an all-encompassing catalog of documents.

A simple format for your teaching portfolio includes two parts:

1. a three to six page *reflective statement* about your teaching (usually a description of experiences, goals, strategies, philosophy) and
2. appendices comprising *documentary evidence* supporting the assertions made in your reflective statement (typically written evaluations from your department and your students, sample syllabi, a list of courses you have taught, evidence of professional development).

The selection of materials reflects the scope and quality of your teaching in various areas of instruction. The narrative sections establish context and continuity for the selected materials. Teaching portfolios can take different shapes and serve various purposes.

### **Preparing an Effective Portfolio: Which Materials Are Included?**

According to Floyd Urbach, seven dimensions of documenting a teaching portfolio must be considered. He suggests that a portfolio should include information (i.e. reflection based on a list of questions to consider and possible types of documents and artifacts) about

What you teach  
How you teach  
Changes in your teaching and courses  
Rigor in your academic standards  
Student impressions of your teaching and their learning  
Your efforts at developing your teaching skills  
Assessment of your teaching by colleagues.

Supporting evidence for the assertions you make in your reflective statement is included in the portfolio appendices. The selection of materials for the appendix should be based on how well they demonstrate the connection between your

concepts of teaching and your actual teaching practice. Since evidence of successful teaching practice is an important element of this equation, evaluations by your students, peers and supervisors add particular strength to your portfolio. Schools and departments using portfolios as part of an evaluation system often require specific kinds of documentation but usually allow you to include additional material.

### **How to Get Started: Steps to Creating a Teaching Portfolio**

Starting a portfolio is best accomplished in partnership with a colleague or mentor. Find out what others in your field have in their portfolios. Keep in mind that your portfolio is changing over time. Be selective of what you include in your portfolio. Too many items are as much of a mistake as too few! The following steps can function as a general guideline:

**Step 1:** Summarize your teaching responsibilities.

**Step 2:** Describe your approach to teaching. Write reflective statements based on the syllabi for courses you have taught. Then write an overall statement of your teaching philosophy (how and why you teach) to guide the reader through your samples of supporting materials. Describe methods, materials, objectives of instruction, ongoing efforts to improve your teaching, your future teaching goals etc.

**Step 3:** Select representative samples of supporting materials (from you, from others, products of student learning); prepare statements on various items if necessary.

**Step 4:** Arrange the items in order and include a table of contents.

### **The following questions may help you get started:**

**What are your teaching responsibilities? Have you been responsible for designing new courses or for redesigning old courses?**

How do you teach? How would you describe your teaching style and methods?

Why do you teach as you do? What are your teaching goals?

Who are your students? How do the types of students affect how you teach your courses?

What are some of your underlying beliefs in how students learn?

Which major course projects, assignments or other activities did you use to support or help students learn, to help students achieve your instructional goals?

How do you motivate students to learn? How do you accommodate different learning styles and levels of preparation? How do you establish a classroom environment conducive to learning?

How do you maintain a current knowledge base about how students learn your discipline and about how colleagues teach your discipline? How do you change your courses to reflect that knowledge?

What are your future goals for teaching?

What do you do to enhance your teaching effectiveness? Are you willing to experiment in your classroom practices?

Which areas of the teaching and learning process do you expect to document and/or examine in the preparation of your teaching portfolio?

What kinds of evidence would demonstrate that your teaching practice reflects your teaching beliefs, theories and goals?

What would you include in your portfolio to document your teaching effectiveness, your teaching philosophy and goals? Which of these items do you have, and which items will you need to develop or acquire?

The Portfolio provides an infrastructure to reflect upon, analyze, and improve your teaching. It also documents your teaching experience, materials, and efforts at improving instruction. This documentation can be used here at MSU when you apply for an assistantship and on the job market. But it is important to begin your portfolio as early as possible in your teaching career and to continually update it with the completion of each class you teach. If you do this, you will avoid scrambling to put together a portfolio at the last minute. Taking a small amount of time to organize your materials into a portfolio will enhance your teaching and marketability in the future.

### **“Documenting Your Professional Progress”**

#### **Selected Bibliography**

Anthony, Rebecca. *The Curriculum Vitae Handbook: Using your CV to Present and Promote your Academic Career*. Iowa City, Iowa: Rudi, 1994.

Brinko, Kathleen. "Documenting Excellence in Teaching." *The Teaching Professor* 5:8 (October 1991): 3-4.

Centra, John A. "The Use of the Teaching Portfolio and Student Evaluations for Summative Evaluation." *Journal of Higher Education*, Vol. 65, No. 5, 1994, 554-570.

Edgerton, Russell. *The Teaching Portfolio: Capturing the Scholarship in Teaching*. Washington, CD: American Association for Higher Education, 1991.

Glatthorn, Allan A. *The Teacher's Portfolio: Fostering and Documenting Professional Development*. Rockport, MA: Pro Active, 1996.

Green, James E. *The Teacher Portfolio: A Strategy for Professional Development and Evaluation*. Lancaster, PA: Technomic, 1996.

Hutchings, Pat. "The Teaching Portfolio: Capturing the Scholarship of Teaching." Washington, D.C.: American Association for Higher Education.

Jackson, Acy L. *How to Prepare Your Curriculum Vitae*. 2nd Ed. Lincolnwood, Ill: VGM Career Horizons, 1996.

MSU Certification in College Teaching Guidebook.  
<http://grad.msu.edu/collegeteaching/>.

Murray, John P. *Successful Faculty Development and Evaluation: The Complete Teaching Portfolio*. Washington DC: Graduate School of Education and Human Development, George Washington University, 1997.

Seldin, Peter. *Successful Use of Teaching Portfolios*. Bolton, MA: Anker, 1993.

Seldin, Peter, & Miller, Elizabeth. *The Academic Portfolio: A Practical Guide to Documenting Teaching, Research, and Service*. San Francisco, CA: 2009.

## **CAMPUS RESOURCES FOR TAs: A SHORT GUIDE**

Teaching is a challenge, so every TA deserves as much practical help as the university can give. Scattered on campus are many resources and services that can help you do your TA work more easily and effectively. This directory is a guide to those resources.

**Section One, "Logistical Support,"** examines sources of technology and media that you can use in your classroom and facilities outside the classroom that you or your students can use in connection with your course.

**Section Two, "Support for Your Teaching,"** provides resources to help you improve and develop your teaching skills.

**Section Three, "Support Services for Your Students,"** lists campus offices to which you can refer individual students when they need help with personal problems, career planning, or particular learning difficulties.

**Section Four, "Problem Prevention and Conflict Resolution,"** highlights the offices where you or your students can go for help regarding serious conflicts, such as violation of the law, violence, harassment, abuse of authority, violation of university policies.

## I. LOGISTICAL SUPPORT

### Computer Hardware, Software, and Information:

Microcomputer Labs

Computer Store

Computing Resource Center

Consulting

### Audio-Visual Media

Film, Video, and Audio Collections

Broadcast Service through Instructional Television (ITV)

Delivery of Audio-Visual Equipment to Your Classroom [Instructional Media Center (IMC)]

Main Library Audio-Visual Laboratory and Reserve

Language Laboratory Audio-Visual Equipment and Reserve

### Consulting Services

Statistical Consulting Service

### Print Media

Main Library Assigned Reading Department

Assigned Readings, Departmental and College Libraries

COGS Copy Center

## **COMPUTER HARDWARE, SOFTWARE, AND INFORMATION      ATS HELPDESK** **[HTTP://HELP.MSU.EDU/](http://help.msu.edu/)**

MSU's Computer Laboratory is responsible for organizing computer services on campus. The Computer Lab administers its services to the MSU community through the Computer Information Center (CIC), 305 Computer Center (355-4500). Among the services of interest to TAs are:

**Computer Labs:** Laboratories equipped with personal computers (IBM compatible, Macintosh, NeXT and Sun Computers) are available for TAs and students to use free of charge at many locations on campus. The labs can be used for word-processing, graphics, desk-top publishing, classroom assignments, programming, electronic mail and computer enrollment. Most labs are also connected to MSUnet (the campus computer network) and can be used to access the university's mainframe computer. For the hours and particular lab specifications, contact the Computing Information Center, Room 305 Computer Center, or 355-4500. The sixteen locations are: Computer Center, Biochemistry Bldg, Case Hall, Eppley Center, Kedzie Hall, MSU Union, Olds Hall, Wilson Hall, Bessey Hall, Brody Complex, Chemistry Bldg, Holmes Hall, MSU Main Library, Music Practice Bldg., and Wells Hall.

**Computer Store:** Located at 305 Computer Center (355-4500), the store operates a large demonstration area where you can try out hardware, software and peripherals; and provides some free software, including a disk virus protection program and Kermit, a dial-up communication package explained under "Electronic Computer Communication."

**Computing Resource Center:** Located at 305 Computer Center, (355-4500). The Resource Center:

distributes reference materials and publishes literature on computer hardware, software and services; and offers self-paced tutorials and low-cost classes on how to use certain software and hardware;

**Consulting:** The Computer Information Center provides services and consultation on: basic access issues, including electronic mail and networking; mainframe and microcomputer applications; and software products and applications.

### **Audio-Visual Media**

With modern technology, the possibilities for using audio-visual media in teaching are vast. Not only does MSU have large, varied collections of audiovisual materials (films, tapes, slides, etc), but it also provides you with equipment and opportunities for using these materials in teaching your students.

**Film, Video, and Audio Collections:** Several collections of film, videos, and audio tapes are available for instruction on campus:

**Instructional TV (ITV)** maintains a video library of over 3000 videotapes. To view a catalog, stop by the ITV Library, 105 Communication Arts Building. Catalogs with descriptions of individual videos are available by subject. Viewings may also be arranged by appointment. A partial listing of ITV holdings may be viewed on E-mail.

**The Instructional Media Center (IMC)** (separate from ITV) maintains a collection of films. Catalogs of film holdings are available at the Instructional Media Building, or the catalog can be sent on disk. Films also may be previewed at the Instructional Media Building. To request a catalogue or arrange a preview, call 353-3960.

**The National Voice Library** houses recordings of over 8,000 famous voices, the largest collection of its kind in the world. It has particularly strong holdings in American politics, foreign politics, labor relations, show business, media history, academic lectures, sports, local history, jazz and popular song, and literature. If you would like to include audio materials in your students' curriculum, either visit or phone the Voice Library at 4<sup>th</sup> Floor West Main Library, 355-5122.

**Broadcast Service through Instructional Television (ITV):** MSU has a closed circuit TV system run by Instructional TV which is linked to many classrooms. If your classroom has an overhead monitor, it is part of the TV system, and you can arrange for ITV to broadcast specific films and videos into your classroom at specific times. If your regular classroom is not part of the system, you can reserve a special classroom equipped for a showing through ITV. To make arrangements for an ITV showing, either in your own or a special classroom, call the ITV Library, 355-2300, ext. 202. Room and showing arrangements should be made early in the semester, particularly if the video you want show is more than 50 minutes in length. In addition to broadcasting university owned films and videos, ITV will also broadcast videos that you bring in personally from network TV or PBS recordings. It will not broadcast commercial tapes rented from a video store or videos recorded from pay-cable channels such as HBO. To use a rented film or other restricted programming, you need to use IMC equipment, which involves a fee (see below). ITV services are free for instructors.

**Delivery of Audio-Visual Equipment to Your Classroom [Instructional Media Center (IMC)]:** The Instructional Media Center maintains audiovisual equipment for campus instructional purposes. For a nominal fee, which is billed to your department, you can have IMC deliver audio-visual equipment to your classroom on a specified day. To order equipment, get your department's approval and account number first. Then, with the account number and your course and section number handy, contact IMC at 353-3960 to make your order. The following items are available for classrooms with at least 24 hours notice (some can be ordered in advance for an entire semester; in addition some can be rented by graduate students or faculty for non-classroom purposes, for \$10 to \$30):

- TV monitors (1 to 2 can be delivered at a time)
- VCRs (Beta and VHS)
- Slide projectors
- Film projectors
- Overhead projectors
- Liquid crystal display units (to project the image on your computer screen onto a larger screen)
- Laser disc players (capable of playing CDs as well)
- Viewing screens
- Microphones
- Audience response systems (individual keypads for surveying class responses or opinions)

**Main Library Audio-Visual Laboratory and Reserve:** To place videotapes or audio tapes on reserve at the Audio-Visual Library, 4th Floor, West Wing, MSU Main

Library, contact John Shaw at 353-1753 to make arrangements. Students can check out and then view the materials on site. Both VHS and BETA formats are acceptable. Cassette recorders are also available for use.

**Language Laboratory Audio-Visual Equipment and Reserve:** The MSU Language Laboratory, in 141 Old Horticulture, maintains facilities for listening to audio materials and for viewing videotaped materials. The Lab will accept audiovisual materials for course reserve. Contact the Language Lab at 355-8374 for information about lab hours, placing materials on reserve, and procedures for reserving the use of equipment. Frequently, the Lab has audio recorders and VCRs that have not been pre-reserved and are available to users on a walk-in basis.

### **Additional Consulting Services**

**Statistical Consulting Service:** Because statistical concepts play an important role in much basic research and in application in a variety of settings, the Department of Statistics and Probability provides a statistical consulting service for researchers from the university.

This service matches its expertise in areas of experimental and survey design, data analysis, statistical quality assurance and reliability, statistical computing, time series, forecasting and modeling with the needs of the user. Consultations during the early design stages of a study are most useful. When appropriate, advanced graduate students in Statistics team with faculty to provide the consultation.

In order to make the best use of SCS resources, please avoid the late semester rush and take note of the SCS rules:

1. There is no charge for the initial contact and discussions. If extensive consulting is required, a fee for services may be charged at an agreed upon rate.
2. If a student seeks extensive consulting from the SCS, a meeting which includes the major professor of the student must be arranged.
3. The SCS does not provide consulting on data entry, the use of mainframe computers and routine statistical analyses, although advice and referrals may be given.

If you wish to use the SCS, please call or email the Department of Statistics and Probability, A404 Wells Hall, 353-7177, [consult@stt.msu.edu](mailto:consult@stt.msu.edu).

## **MSU LIBRARIES**

### **SERVICES FOR TEACHING AND RESEARCH ASSISTANTS**

**MSU Libraries' Home Page** – Your gateway to the extensive resources and services of the Main Library and its nine branches. Search the MAGIC online catalog or explore our “Electronic Resources” page, with links to thousands of online indexes, full-text journal articles, e-books and much more.

<http://www.lib.msu.edu/>

<http://magic.msu.edu/>

<http://er.lib.msu.edu/>

**ASK A LIBRARIAN!** 24/7, online access to a university librarian-

<http://www.lib.msu.edu/contact/askalib.jsp>

**Library Instruction Services** – Course-specific library instruction and tours for the classes you teach, presented by librarian subject specialists and bibliographers. Book a session online and let us introduce your students to print and Web-based library resources—plus effective strategies for using them.

<http://www.lib.msu.edu/resources/reserves-faq.jsp>

**Subject Specialists** – Library liaisons and contact information for your discipline and individual research interests.

<http://www.lib.msu.edu/contact/subjectlibrarian.jsp>

**Classes and Seminars** – Free sessions (most only one hour long) presented each semester on a variety of library-related topics, including “Introduction to Library Electronic Resources” and “Learn to Speak Library,” designed to increase your information skills and academic success.

<http://www.lib.msu.edu/general/events/workshops.jsp>

**EndNote** – See Tools & Toys!

<http://blogpublic.lib.msu.edu/index.php?blog=35&paged=2>

**Grants and Related Funding Sources**- electronic and printed funding resources, indexes and directories available through MSU Libraries and the Internet

<http://staff.lib.msu.edu/harris23/grants/index.htm>

**Reserve Reading** – Course-specific materials you select from library collections or provided by faculty, available for a short loan period and searchable by course number or instructor in the MAGIC online catalog.

<http://www.lib.msu.edu/resources/reserves.jsp>

**Research Guides** – Suggested research tools, research strategies, and Web resources for a variety of topics to get you started on your research.

[http://er.lib.msu.edu/guides\\_all.cfm](http://er.lib.msu.edu/guides_all.cfm)

**Inter Library Services** – Borrow or obtain copies of materials not available at the MSU Libraries.

<http://www.lib.msu.edu/about/ils/>

## PRINT MEDIA

**Main Library Reserve Reading Department:** TAs who wish to reserve certain books for assigned class readings can do so at the Main Library's Reserve Reading Department, 1st floor, East Wing. To place a book on reserve, TAs need only complete a one-page form giving their name, the course and section number they are teaching, and the author, title, and call number of the book they want reserved. This form will then be placed in one of several binders for easy reference by student. Some restrictions on book reservation apply. For full information and reservation forms, stop by Reserve Reading, call 353-8721.

**Reserve Readings, Departmental and College Libraries:** The main library administers branch libraries and reference rooms at different colleges and departments across campus. If you have a departmental specific reference room or library and would like to place items on assigned reading, visit the library and ask to speak with the Branch librarian. Lending and reserve policies differ across the campus library system. The following is a list of libraries operated by the Main Library:

Agricultural Economics Reference Room, 219 Agriculture Hall,	355-6650
Animal Industries Reference Room, 3285 Anthony Hall, .....	355-8483
Business Library, 50 DCL Bldg., .....	355-3380
Chemistry Library, 426 Chemistry, .....	355-9715 x363
Clinical Center Library, A137 Clinical Center, .....	353-3037
Conrad Library, 101 Conrad Hall, .....	353-1738
Engineering Library, 1515 Engineering Building, .....	355-8536
Geology Library, 5 Natural Science, .....	353-7988
Labor and Industrial Relations Library, Main Library Bldg.....	355-4647
Mathematics Library, D101 Wells Hall,.....	353-8852
Music Library, 253 Music Building, .....	353-4593
Physics Library, 230 Physics-Astronomy Building, .....	355-9704
Planning and Design Library, 212 Urban Plan Building, .....	353-3941
Veterinary Medical Center Library, G201 Vet Med Center, .	353-5099

**COGS Copy Center:** The Council of Graduate Students has two high-quality photocopiers for use at low prices. All 8.5" x 11" copies are 4 cents each, 8.5" x 14" copies are 4.5 cents each, and 11" x 17" copies are 5.5 cents each. Transparencies are available. The COGS Copy Center is able to provide features such as collating, reducing and enlarging, two-sided copying, and automatic sheet feed. Office staff members are always on hand to assist you. You can find the COGS Copy Center at 316 Student Services Building. Hours are 9-5, Monday through Friday.

## II. SUPPORT SERVICES FOR YOUR TEACHING

- Courses on Teaching
- TECHE Modules
- Graduate School Professional Development Workshops
- TAP Workshop Series
- Responsible Conduct of Research Series
- Videotapes on Teaching
- Instructional Software Collection
- MSU TA Program Resources on College Teaching
- Test Scoring Office
- MSU Excellence-in-Teaching Citations for Graduate TAs

**Courses on Teaching:** Several MSU departments and colleges sponsor courses on the theory and practice of teaching for TAs. The College of Education also offers courses of great relevance for new college teachers. Often these classes are offered by the most dedicated mentor-teachers on campus. We encourage you to with the department or instructor about relevant schedules and enrollment restrictions and requirements. If a course is not offered the semester you need it, you still may meet a faculty member who has a valuable syllabus and bibliography to share.

### **TECHE Modules**

The MSU Graduate School offers all graduate students with access to a series of online, on-demand modules that explore various facets of teaching. Called "Teaching Essentials for Careers in Higher Education" (TECHE) These were created by world-class professionals and offer a comprehensive overview of various topics, which you can explore at your own pace. They cover topics such as lectures, facilitating discussions, and course design, and login information can be found here: <http://tap.msu.edu/teche/>.

**TA Workshop Series:** Each year the Teaching Assistant Program (TAP) organizes workshops to give TAs practical tools for teaching and classroom management. Conducted by experienced faculty members development professionals, these workshops change each semester. See [www.tap.msu.edu](http://www.tap.msu.edu) for the most updated information.

**Videotapes on Teaching:** A collection of videotapes on teaching methods and problems is now available at the Audio Visual (A.V.) Reserve, 4th Floor West, MSU Main Library. The collection includes tapes of the most successful and highly rated Lilly Fellows and TA workshops, as well as commercially distributed materials. The videos are listed in the A.V. Reserve binders under "TA 000 #\_\_ " and a catalogue is also available from the TA Program. TAs may view videos during the A.V. Reserve's

regular hours of operation. Call Main Library Information, 353-8700, for exact hours. You will need your current MSU I.D. in order to request videos.

**Instructional Software Collection:** The instructional Software Collection houses demonstration copies of hundreds of software packages and videodiscs for graduate and undergraduate coursework, curriculum development, and research. Programs cover all subject areas and include computer-aided instruction, models and simulations, tutorials, and drill and practice packages. Programs may be checked out for three days by faculty or graduate students, or run on equipment in room E208 of the Main Library. Call 355-1840 for hours.

**TA Program Resources:** The TA Program has a wide collection of resources on teaching and graduate student professional development. Should you want to borrow any of these materials or consult the staff on matters of pedagogy or policy, feel free to drop by the TAP, 9 International Center, or call 353-3063 for assistance. **(See the end of Appendix A for a detailed description of MSU TA Office resources and services.)**

**Test Scoring Office:** TAs who wish to give multiple-choice or other objective exams and have them scored by computer should contact the Scoring Office, 208 Computer Center, 355-1819. Its many services include grade and record keeping, free test scoring, test analysis and item analysis and feedback generating for students. The Scoring Office also offers free consultation on design of data entry systems, test and survey design and computer management of instruction by appointment on a first-come, first-served basis, 8:00 am to 5:00 pm, Monday through Friday. The Scoring Office will provide TAs with a wide variety of standardized bubble sheets free of charge for your students to use in answering objective tests. The office's optical scanners can then read the student responses coded on the sheets. Once the exams have been processed, a test score distribution report will be generated for your use. This report will give an analysis of item difficulties, item discriminations, and patterns of student response. It will also provide a single-page report for each student, listing the student's name, student number, raw score, percentile rank and standard score. Reports by student number only can be requested so the lists may be posted for student inspection. For help in the preparation of student exercises, exams, drills or homework assignments, inquire about SOCRATES, a menu-driven item storage and retrieval program containing a supply of ready-to-use exercises and test items classified by subject.

**MSU Excellence-in-Teaching Citations for Graduate Teaching Assistants:** Each year, MSU Excellence-In-Teaching Citations are awarded to six graduate teaching assistants. The citation brings University-wide recognition to the best of the graduate teaching assistants and underlines the qualitative contribution that they make to the undergraduate program. Recipients receive public recognition at an

awards ceremony and receive a monetary award. Candidates are nominated by supervising professors and/or faculty teaching advisors.

### **III. SUPPORT SERVICES FOR YOUR STUDENTS**

#### Academic Advice and Support

- Academic Advisors
- Learning Resources Center (LRC)
- Writing Center
- Service-Learning Center

#### Career Development and Placement

- Career Development Center
- Employment Listings (Student Employment Office)
- Assistance with Job Searches
- Assistance with Life and Career Planning
- Internship Placements for Career Development

#### Personal Counseling and Counseling Center

- General Counseling Services
- Minority Counseling Programs
- The Testing Office
- The Self-Management Laboratory

#### Special Needs

- Achieving Program and Classroom Accessibility for Handicappers  
[The Resource Center for Persons with Disabilities (RCPD)]
- Office of Minority Student Affairs
- Office of Supportive Services (OSS)
- University Women's Resource Center

All TAs should be aware of an annual publication available from the Career Development Center: *The Referral Directory: Directory of Michigan State University Referral Resources*. A complete guide to MSU referral resources for career and educational information, the directory is the source for much of the information below and lists faculty and staff who are available to talk with students about educational and career goals. TAs are urged to get a copy or browse through it on Gopher.

## **ACADEMIC ADVICE AND SUPPORT**

**Academic Advisors:** MSU's trained academic advisors give students information about academic and major requirements, courses and course schedules, academic policies, forms, and academic actions such as drops and adds, incompletes, major changes, and the like. TAs who are uncertain how to handle a particular student's advisory needs should call an advisor for guidance and referral. Those students who have not yet declared a major preference should consult advisors at the University Undergraduate Division, 170 Bessey Hall, (355-3515). Students who have already declared their major preference or entered a major should consult advisors in their department or college. In regard to questions about course scheduling or the requirements of a major, students should be sent to their departmental advisor. For broader policy questions, late drops, serious personal problems, and withdrawals from the university, students should be sent to their college advisors.

**Learning Resources Center (LRC):** The Learning Resources Center (LRC), 209J Bessey Hall, (355-2363) provides instructional facilities, staff, and materials for MSU students interested in improving their reading, writing, listening, study and test-taking skills. TAs and faculty can refer students to the LRC for special assistance through the use of referral forms, which can be obtained from the LRC office. Students may be directed to self-learning modules, helped by trained staff, or connected with qualified tutors. Students do not need to make an appointment to use the computer-assisted materials in math, writing, and speed reading. If students want to meet individually with a tutor or instructor, however, they need to schedule an appointment. The staff also provides evaluation to determine if the student has a learning disability, and offer referral for special assistance for handicapped or disabled students. If desired, the LRC can report the results of a student referral to the referring TA or faculty member.

**The Writing Center:** Students who desire special assistance with specific writing projects may obtain individualized assistance at the Writing Center, 300 Bessey Hall. Both undergraduate and graduate students are welcome. Unlike the Learning Resources Center, the Writing Center does not offer learning modules in general writing skills. Instead, trained writing consultants help students with actual papers the students have written, using special questioning techniques to encourage students to think problems through for themselves. TAs and graduate students who are interested in becoming consultants at the Writing Center should call 432-3610 for more information.

**Service-Learning Center:** The Service-Learning Center, 27 Student Services, provides undergraduate and graduate students opportunities to learn and explore careers through voluntary community service. Students should speak with their departmental or college advisors about obtaining internship credits for some kinds of volunteer work. Programs are available in the Lansing area in business,

communications, corrections, education, government, law, health, personnel, nutrition, recreation, science, social work, special education, and veterinary medicine. Students schedule from four to six hours per week for their placement. Employers agree that career exposure and community service work are valuable additions to a student's academic program. Some students are offered paying positions by their service-learning employers upon completion of their service. Information and applications are available in the office at 27 Student Services from noon to 5 P.M.

### **Career Development and Placement**

MSU's Career Development and Placement Center, located at 113 Student Services, offers support to all students seeking career planning assistance. The following services, among others, are administered through the center:

**Career Development Center:** The Career Development Center, Room 6 of the Student Services Building, provides free information on careers in various majors. The Center houses background information on numerous corporations and agencies (history, philosophy, positions offered), and the largest collection of graduate and professional school catalogues on campus. The center also offers a comprehensive collection of magazines, books, videos, microfiche, and free handouts on career exploration covering such subjects as selecting a major, researching employers, writing resumes and cover letters, interviewing techniques, salary studies and projections, specific job openings, and networking.

### **PERSONAL COUNSELING AND COUNSELING CENTER**

**General Counseling Services** are provided by the Counseling Center to regularly enrolled MSU students free of charge. Counselors assist in dealing with such issues as family pressures, feelings of inadequacy, motivation, uncertainty concerning aptitudes and interests, or generalized problems in decision-making. Career, ethnic, self-management, sexual assault and substance abuse counseling are also provided. Special group counseling services are available and will be discussed during the initial meeting with the counselor. In addition, the Self-Management Laboratory provides resources for students considering self-directed behavioral changes.

**Minority Counseling Programs** are available via the Multi-Ethnic Counseling Center Alliance (MECCA), for students who wish to discuss specific issues or to work with minority counselors. Refer students to 207 Student Services for a complete list of services.

**The Testing Office**, located in 207 Student Services, is not only a national test and testing information center (for the GRE, LSAT, etc.), but also provides complete

testing services for students working with counselors in the assessment of their personal attributes. Resources include interactive computer-based guidance systems which provide assistance in making informed major choices and career decisions. They can help gather information, explore options, and develop strategies for decision-making.

**The Self-Management Laboratory**, located in 207 Student Services, offers resources for self-help with assertion, anxiety, insomnia, thought problems, stress management, self-esteem, and career decision-making. It contains the System for Interactive Guidance and Information (SIGI+), a computer-assisted career information program to aid students in the process of making informed career decisions. SIGI+ is also offered in the following locations:

Career Information Center, 6 Student Services, 355-9510, ext. 335

Learning Resources Center, 209J Bessey Hall, 355-2363

Adult Services, Office of the Vice Provost for University Outreach, 51 Kellogg Center, 353-0139 or 353-0791

## **SPECIAL NEEDS**

### **Achieving Program and Classroom Accessibility for Handicappers**

#### **Program Accessibility For Students And Employees With Disabilities: Teaching Assistant Responsibilities**

The Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973, as amended in 1998 (ADA), prohibits discrimination against persons with disabilities. Under these laws, MSU students and staff with certified disabilities have rights to special support (known as 'accommodations') that enable them to participate fully in university programs. Michigan State University makes every effort to comply with both the letter and the spirit of these laws. As a representative of the University, you will be expected to comply as well.

The Resource Center for Persons with Disabilities (RCPD) is the university office responsible for MSU's compliance and ensuring the full inclusion of persons with disabilities into the MSU community. All types of special accommodations for MSU students or staff with disabilities are approved and facilitated by this office. This is the office that you as a TA should contact if you have questions or problems regarding any students with disabilities. The office is located in 120 Bessey Hall, (517) 353-9642 (voice) or (517) 355-1293 (TTY).

Your responsibilities as a teaching assistant include the following:

1. At the beginning of each semester, you should announce the location and phone number of the RCPD so your students are aware of it. Put this information in your syllabus for students who may miss your announcement.
2. If a student indicates that he or she has a disability and has not registered with the Resource Center for Persons with Disabilities, please refer the student to the center. Once a student has registered with the RCPD, a complete needs-assessment is conducted and the RCPD can help you understand what accommodations are appropriate for that student.
3. Some students with disabilities who request accommodations will have a letter from the RCPD that states the specific ways that you can be of help. Please follow the instructions on the letter. Call the RCPD if you have questions regarding the accommodations for any student.
4. Some students, whether registered with RCPD or not, may identify themselves to you and request accommodations that seem complicated or unreasonable (e.g., unlimited time for tests, or an expensive piece of equipment to use in class). Call the RCPD for assistance.

In addition:

5. You are NEVER asked to determine the level or type of accommodation that is appropriate for a student. That is the responsibility of the staff specialists at the RCPD.
6. You may NOT inquire about the nature of the disability. That is protected information. You MUST provide the accommodations provided on the form provided by the RCPD.
7. Do not independently amend the recommended accommodations determined by the RCPD staff. The specialists at RCPD recommend specific reasonable accommodations after consultations with the student and evaluation of supporting documentation.

Your general responsibilities under the ADA also include the following:

1. Plan every event or meeting in an accessible and accommodating facility. This is to be done when you know someone with a disability will attend or when you cannot predict if someone with a disability will attend.
2. Any publicity materials for special events (including meetings) should include a statement listing whom to call to request accommodations.

## **Office for Inclusion and Intercultural Initiatives**

<http://www.inclusion.msu.edu/>

Serves as an institutional focal point for promoting inclusion and diversity at Michigan State University. In addition to providing leadership and support for university-wide initiatives on inclusive excellence, a staff of experts work diligently to facilitate and support a campus environment that provides students, faculty, and staff with opportunities for excellence. This is done by:

- facilitating collaboration across university units to enhance and promote inclusion, diversity, institutional equity and community outreach through respect, civility, accountability and intercultural understanding.
- leveraging change by providing programming, education/development opportunities, and support for other MSU inclusion/diversity services and resources.

**Office of Supportive Services (OSS):** The Office of Supportive Services, located in 209 Bessey Hall, provides assistance to College Achievement Admission Program (CAAP) students who may require additional academic support. CAAP students come from educationally disadvantaged areas of Michigan, and are admitted to the undergraduate program by special provision. OSS services to CAAP students include personal and academic counseling, tutorial assistance, and skill-building workshops. All entering CAAP students are assigned an academic guidance counselor at OSS who meets with them regularly until they establish satisfactory academic progress. If a CAAP student in your class is experiencing academic difficulties, you may notify OSS. OSS will then call the student in for additional counseling and tutoring. For information or assistance, call 353-5210.

**University Women's Resource Center:** Of its many vital roles, the University Women's Resource Center provides: 1) information, resources and assistance to individual female students, staff, and faculty on matter of equal opportunity and gender equity; 2) serves as a resource for women in identifying problems and resolution strategies; 3) provides information about and referral to on- and off-campus units which may assist women in such matters as economic hardship, domestic assault, housing, dysfunctional families, child care, and additional/continuing education. The Women's Resource Center is committed to ensuring a comfortable campus climate for all campus members, particularly women. It offers services that focus on recognizing and responding to sexual harassment. Advice and referrals are given to individuals who feel that they may have experienced sexual harassment. The Women's Resource Center also offers assistance in the informal resolution of sexual harassment complaints.

#### **IV. PROBLEM PREVENTION/CONFLICT RESOLUTION**

**Office of the Ombudsman:** The Ombudsman is a senior faculty member appointed by the President to assist students at all levels in resolving problems and complaints involving instructors, teaching assistants, administrators, and staff. Operating in a confidential, neutral, and independent manner, the Ombudsman assesses the validity of each complaint, advises on possible options, and, where indicated, actively investigates the problem. For example, TAs may seek the Ombudsman's assistance regarding conflicts or problems with a student, with their professor or TA supervisor, or with other university staff. The Ombudsman also assists students in requesting formal grievance hearings. For detailed discussions of various issues, including academic integrity, course syllabi, and classroom disruption, visit the Ombudsman website: [www.msu.edu/unit/ombud](http://www.msu.edu/unit/ombud) .

The Office of the Ombudsman is located in 129 N. Kedzie Hall. Call 517/353-8830 or e-mail at [ombud@msu.edu](mailto:ombud@msu.edu) . The office is open from 8 a.m. to noon and from 1 p.m. to 5 p.m. Monday through Friday throughout the year.

**THIS HANDBOOK IS A VALUABLE RESOURCE, BUT IT IS NOT COMPREHENSIVE IN COVERING EVERY POSSIBLE SITUATION. CHECK WITH YOUR DEPARTMENT ABOUT ADDITIONAL INFORMATION YOU MIGHT NEED.**

**IT IS ESSENTIAL THAT YOU FAMILIARIZE YOURSELF WITH ALL UNIVERSITY POLICIES, ESPECIALLY THOSE THAT WILL INFLUENCE YOUR TEACHING.**

**MSU SPARTAN LIFE:**

<http://splife.studentlife.msu.edu/>

**MSU ANTI-DISCRIMINATION POLICY:**

<http://www.hr.msu.edu/documents/facacadhandbooks/facultyhandbook/AntiDiscrimPolicy.htm>

**MSU POLICY ON SEXUAL HARRASSMENT**

<http://www.hr.msu.edu/documents/uwidepolproc/sexharass.htm>

**CODE OF TEACHING RESPONSIBILITY**

<http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=514>