Upper-division Writing Requirement Review Form (12/1/08)

I. General Education Review – Upper-division Writing Requirement

<table>
<thead>
<tr>
<th>Dept/Program Subject</th>
<th>Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course(s) Title</td>
<td>Water Policy</td>
</tr>
<tr>
<td>Description of the requirement if it is not a single course</td>
<td></td>
</tr>
</tbody>
</table>

II. Endorsement/Approvals
Complete the form and obtain signatures before submitting to Faculty Senate Office.

| Instructor          | David Shively |
| Phone / Email       | X6478 david.shively@umontana.edu |
| Program Chair       | Sarah Halvorson |

III. Overview of the Course Purpose/Description

Course Description
U 335 Water Policy 3 cr. Offered autumn. Prereq., upper-division standing. Exploration of water resources issues facing the public, resource managers, and water users in the western United States today. Examines concepts, terms, and regulatory environment which provide the foundation for modern water management and policy.

Course Objectives

Upon completion of this course, you should be able to:

- Describe the hydrologic cycle in terms of its components and linkages.
- Describe the manner in which different physical factors (i.e., climate, topography, landforms) shape the distribution of water resources in time and space.
- List and describe the various water related goods and services desired by humans and the manner in which they are provided by water resource managers.
- Discuss the manner in which different human groups have modified the workings of the hydrologic cycle in order to produce water related goods and services.
- Discuss the ways in which humans have established policies and institutional arrangements, and the nature of these, to aid in the creation and delivery of water related goods and services.
- Discuss how different levels of government have authority for water resources management, describe their management activities, and discuss how state water policies differ from one another.
- Describe how interstate and international waters are managed by the U.S. and its neighbors.
- Discuss how structural economic change and demographic shifts influence water policy.
- Describe the elements of integrated water management.

Course Requirements
Students will demonstrate their learning and ability to synthesize new information and concepts by engaging in frequent and regularly scheduled writing of reviews and/or reflections of/on assigned readings, and in the development of a research paper on a theme or topic germane to the course.
<table>
<thead>
<tr>
<th><strong>IV Learning Outcomes:</strong> Explain how each of the following learning outcomes will be achieved.</th>
</tr>
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<tbody>
<tr>
<td><strong>Student learning outcomes:</strong> Identify and pursue more sophisticated questions for academic inquiry</td>
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<tr>
<td>Find, evaluate, analyze, and synthesize information effectively from diverse sources (see <a href="http://www.lib.umt.edu/informationliteracy/">http://www.lib.umt.edu/informationliteracy/</a>)</td>
</tr>
<tr>
<td>Manage multiple perspectives as appropriate</td>
</tr>
<tr>
<td>Recognize the purposes and needs of discipline-specific audiences and adopt the academic voice necessary for the chosen discipline</td>
</tr>
<tr>
<td>Use multiple drafts, revision, and editing in conducting inquiry and preparing written work</td>
</tr>
</tbody>
</table>
Follow the conventions of citation, documentation, and formal presentation appropriate to that discipline

Students will be exposed to several different style conventions employed in Geographic scholarship including those mandated by the flagship journals in the field (e.g., the *Annals of the Assoc. of American Geographers*, and the *Professional Geographer*), and that which is traditionally used in the preparation of monographs (i.e., Chicago/Turabian). They will learn the elements of formal presentation skills and conventions utilized in the presentation of geographic research through critical examination of formal presentations on water policy related research by the instructor, invited guest speakers, their peers, and themselves.

Develop competence in information technology and digital literacy

As an initial step in the development of their research papers, students will receive training in electronically and non-electronically focused information and literature-focused research skills through their instructor and the Geography Department’s Subject Liaison Librarian at UM’s Mansfield Library. As they progress through the stages of developing their research papers (i.e., prospectuses, outlines, draft), they will receive constructive written and verbal feedback concerning their evaluation and utilization of the information they have assembled and analyzed.

V. Writing Course Requirements Check list

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is enrollment capped at 25 students? If not, list maximum course enrollment. Explain how outcomes will be adequately met for this number of students. Justify the request for variance.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Are outcomes listed in the course syllabus? If not, how will students be informed of course expectations?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Are detailed requirements for all written assignments including criteria for evaluation in the course syllabus? If not how and when will students be informed of written assignments?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Briefly explain how students are provided with tools and strategies for effective writing and editing in the major.</td>
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</tbody>
</table>
required to purchase and utilize a resource such as the *Guide to Rapid Revision* (8th) edition which details syntax, grammatical, and editorial conventions employed in writing and editing. The editing symbols described and explained in the *Guide* will be employed by the instructor, and s/he will devote time in the early portion of the course, and when needed, to discussion of the proper utilization of the *Guide* and editing practices.

Will written assignments include an opportunity for revision? If not, then explain how students will receive and use feedback to improve their writing ability.

**X Yes □ No** While students will not necessarily be required to revise and resubmit reviews, reflections, and essays, they will be directed to incorporate suggested corrections and revisions into subsequent assignments. They will be encouraged to revise and resubmit their work, however, in order to gain the most benefit from the feedback provided by the instructor. All students will be expected to incorporate suggested corrections and revisions of their research paper drafts into the final draft, and where there are any questions or issues concerning the direction of the work, or composition, they will be encouraged to visit with the instructor to clarify and resolve these.

Are expectations for Information Literacy listed in the course syllabus? If not, how will students be informed of course expectations?

**X Yes □ No**

**VI. Writing Assignments:** Please describe course assignments. Students should be required to individually compose at least 20 pages of writing for assessment. At least 50% of the course grade should be based on students’ performance on writing assignments. Clear expression, quality, and accuracy of content are considered an integral part of the grade on any writing assignment.

Formal Graded Assignments

The research paper will be graded formally and will entail at least 12 pages of composition, excluding title page, TOC, lists, appended tables and figures. It should deal substantively with a topic or theme coming from the course content, be geographic in its approach, be informed by a quite thorough review of current research and other literature, be well composed for an expert audience using appropriate style conventions, and free of grammatical and punctuation errors. The paper, and its iterative stages (e.g., prospectus, outline, draft,
Ten or more reviews of assigned readings will be assessed using a simple rubric that addresses the extent to which the instructions were followed, and the quality of writing (i.e., very good quality with minimal problems, some problems, many problems – with corresponding point values such as 3/2/1). These writings will represent at least 20 percent of the course grade.

Informal Ungraded Assignments

Reflections and essays will be assigned periodically to allow students the time and opportunity to focus on the articulation of their own opinions and arguments concerning aspects of water policy. These writings will be critiqued, constructively, with respect to the presentation of a thesis concerning the topic at hand, of a summary of information coming from assigned readings and perhaps additional research, and on the strength of the argument(s) articulated in the writing.

**VII. Syllabus:** Paste syllabus below or attach and send digital copy with form. The syllabus should clearly describe how the above criteria are satisfied. For assistance on syllabus preparation see: [http://teaching.berkeley.edu/bgd/syllabus.html](http://teaching.berkeley.edu/bgd/syllabus.html)

Paste syllabus here.

**GEOG 335 – Water Policy**
Department of Geography
The University of Montana
Fall 2009, Shively
TR 9:40-11:00 a.m.

**Dr. David Shively**
Dept. of Geography
Social Science 207
406.243.6478
david.shively@umontana.edu

**Course Description**
In this course, we explore water resources issues facing the public, resource managers, and water users in the western United States today. We examine concepts, terms, and the regulatory environment that provides the foundation for modern water management and policy in this region.

**Course Objectives**
Upon completion of this course, you should be able to:

✓ Describe the hydrologic cycle in terms of its components and linkages.
✓ Describe the manner in which different physical factors (i.e., climate, topography, landforms) shape the distribution of water resources in time and space.
✓ List and describe the various water related goods and services desired by humans and the manner in which they are provided by water resource managers.
✓ Discuss the manner in which different human groups have modified the workings of the hydrologic cycle in order to produce water related goods and services.
✓ Discuss the ways in which humans have established policies and institutional arrangements, and the nature of these, to aid in the creation and delivery of water related goods and services.
✓ Discuss how different levels of government have authority for water resources management, describe their management activities, and discuss how state water policies differ from one another.
✓ Describe how interstate and international waters are managed by the U.S. and its neighbors.
✓ Discuss how structural economic change and demographic shifts influence water policy.
✓ Describe the elements of integrated water management.

During the course you should:

➤ Have fun.
➤ Ask questions.
➤ Contribute to discussions.
➤ Attend any optional fieldtrips.

Course Requirements

You will demonstrate their learning and ability to synthesize new information and concepts by engaging in frequent and regularly scheduled writing of reviews and/or reflections of/on assigned readings, and in the development of a research paper on a theme or topic germane to the course.
**Learning Outcomes**

The University of Montana has developed Learning Outcomes for approved upper division writing courses. We will meet the following outcomes in the manner specified:

<table>
<thead>
<tr>
<th>IV Learning Outcomes: Explain how each of the following learning outcomes will be achieved.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student learning outcomes:</strong> Identify and pursue more sophisticated questions for academic inquiry</td>
</tr>
<tr>
<td>This will be achieved through your reading and reflection on assigned and recommended readings (reflections will take the form of critical reviews and short essays).</td>
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<tr>
<td>Find, evaluate, analyze, and synthesize information effectively from diverse sources (see <a href="http://www.lib.umt.edu/informationliteracy/">http://www.lib.umt.edu/informationliteracy/</a>)</td>
</tr>
<tr>
<td>You will receive training in information and literature-focused (i.e., scholarly and authoritative nonfiction works) research skills through the Geography Department’s Subject Liaison Librarian at UM’s Mansfield Library. As you progress through the stages of developing research papers (i.e., prospectuses, outlines, draft), you will receive constructive written and verbal feedback concerning their evaluation and utilization of the information you have assembled.</td>
</tr>
<tr>
<td>Manage multiple perspectives as appropriate</td>
</tr>
<tr>
<td>Through your research utilizing both scholarly and authoritative non-fiction works, and through your writing activities which include regular feedback from me and opportunities for directed revision, you will be encouraged to explore and consider multiple perspectives bearing on your research topic.</td>
</tr>
<tr>
<td>Recognize the purposes and needs of discipline-specific audiences and adopt the academic voice necessary for the chosen discipline</td>
</tr>
<tr>
<td>Through your research of scholarly and authoritative non-fiction literature relating to water policy formulation, evolution, and implementation, you will be exposed to the intents and different voices that are employed in the communication of empirical findings and theoretical arguments in geographical literature.</td>
</tr>
<tr>
<td>Use multiple drafts, revision, and editing in conducting inquiry and preparing written work</td>
</tr>
<tr>
<td>You will be given the opportunity to improve their composition skills in their regular writings (i.e., reviews, reflections, and essays) and through continual feedback on these writings. Your research papers will be developed in a systematic fashion in which they receive constructive feedback on a prospectus, an annotated outline, a first draft, and a final draft. You will be encouraged to seek initial feedback from peers and Writing Center assistants in the development of their written work prior to submission to the instructor.</td>
</tr>
</tbody>
</table>
Follow the conventions of citation, documentation, and formal presentation appropriate to that discipline

You will be exposed to several different style conventions employed in Geographic scholarship including those mandated by the flagship journals in the field (e.g., the Annals of the Assoc. of American Geographers, and the Professional Geographer, and that which is traditionally used in the preparation of monographs (i.e., Chicago/Turabian). You will learn the elements of formal presentation skills and conventions utilized in the presentation of geographic research through critical examination of formal presentations on water policy related research by the instructor, invited guest speakers, and your peers.

Develop competence in information technology and digital literacy

As an initial step in the development of your research paper, you will receive training in electronically and non-electronically focused information and literature-focused research skills from me and the Geography Department’s Subject Liaison Librarian at UM’s Mansfield Library. As you progress through the stages of developing your research paper (i.e., prospectus, outline, draft), you will receive constructive written and verbal feedback concerning your evaluation and utilization of the information you have assembled and analyzed.

Course Organization
We will employ a number of methods and practices throughout the semester:

- Lecture/Class Discussion - Bring a notebook and take notes!
- Readings from Text - Outline the assigned readings and be prepared to discuss!
- Audio Visual (Videos) - take notes!
- We will visit the field a number of times. You should dress appropriately:
  - Footwear - Closed toe - should allow you to scramble about and boony crash.
  - Long Pants - generally preferable.
  - Jacket/Parka/Sweater - if it is chilly or could be!
  - Pencil & Notebook!

Texts:

**Required:**
Other selected required readings will be posted on the course’s blackboard site.

**Recommended:**

**Non-fiction:**

**Fiction:**
- Hesse, Herman. *Siddhartha.*

**Recommended Films:**
- *Chinatown.*
- *Milagro Beanfield War.*
- *Cadillac Desert.*

**Bibliography**


# Provisional Course Schedule*

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading(s)</th>
</tr>
</thead>
</table>
| 1    | T: Intro to Course, Water Resources Geography  
R: Hydrologic Cycle, Freshwater Availability | R: Hydrologic Cycle - Cech Ch. 2 (pp. 23-36) |
| 2    | T: Climate & Water Resources  
R: Stream Ecology  
F/Sat/Sun: Blackfoot & Clark Fork Rivers Field Trip | T: Cech Ch. 2 (pp. 36-51)  
R: Cech Ch. 3 |
| 3    | T: Mansfield Library Research Orientation.  
R: Style guidelines for writing (formatting, citations, conventions); Cultural Uses of Water | T: N/A  
R: Cech Ch. 1; Clark Chs. 1 & 2. |
| 4    | T: Cultural Uses of Water; Water Allocation in the US – Riparian & Prior Appropriation Doctrines  
R: Water Allocation Cont’d; Paper Prospectus Due. | T: Cech Ch. 8; Matthews Ch. 4 (pp. 37-46)  
R: Same as above |
| 5    | T: Evolution of Western Water Policy (Surface) – Reclamation Act, State Code Development.  
R: Development of Groundwater Policy | T: Shively Section 3.1.1  
R: Cech Ch. 4, Ch. 8 (pp. 234-235); Glennon Ch. 2; Matthews Ch.1 (pp. 5-8). |
| 6    | T: Montana Water Policy (Gerald Mueller Guest Lecture)  
| 7    | T: Water Rights in other Western States – Colorado, Wyoming, New Mexico, Oregon, etc.  
R: MT AWRA Conference | T: TBA  
R: N/A |
| 8    | T: BUREC & the Colorado River; Cadillac Desert Video – An American Nile  
R: Damning the West | T: Reisner Ch 4.; Cech Ch. 9; Dunbar Ch. 5  
R: Reisner Chs 5 & 6 |
| 9    | T: Interstate Compacts & Reserved Rights (Federal & Indian)  
R: International Treaties | T: Cech Ch. 8 (pp. 235-239); Matthews Ch. 4 (pp. 47-54)  
R: Cech Ch. 10 (pp. 305-316); Web - TBA |
| 10   | T: Water Marketing  
R: Instream Flows Guest Lecture: MT Water Trust Guest Lecture | T: Cech Ch. 13; Shively Sections 3.1.3 – 3.1.4  
R: MWT Website; Gillilan & Brown Chs. 5 & 6 |
| 11   | T: Integrated water resources management  
R: Integrated water resources management in Montana; First Draft of Paper Due | T: Mitchell Chs. 1 & 2  
R: Shively & Mueller |
| 12   | T: Veterans Day Holiday (Observed)  
R: Presentations | T: N/A  
R: N/A |
| 13   | T: Presentations  
R: Thanksgiving Holiday | T: N/A  
R: N/A |
| 14   | T: Presentations  
R: Presentations | T: N/A  
R: N/A |
| 15   | T: Presentations  
R: Presentations; Final Draft of Paper Due | T: N/A  
R: N/A |
| **FINAL** | Final Class Meeting to Discuss Writings and Future Water Issues in the West. | |
*Provisional nature of course schedule indicates that though every attempt will be made to adhere to this schedule, it is not written in stone. Any impact of deviations from the schedule on course activities will be considered and adjusted for.

**Course Requirements**

<table>
<thead>
<tr>
<th>Task</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Reviews</td>
<td>20 percent</td>
</tr>
<tr>
<td>Reading Reflections</td>
<td>10 percent</td>
</tr>
<tr>
<td>Essays</td>
<td>15 percent</td>
</tr>
<tr>
<td>Paper</td>
<td>55 percent</td>
</tr>
<tr>
<td>Prospectus</td>
<td>5 percent</td>
</tr>
<tr>
<td>Outline</td>
<td>5 percent</td>
</tr>
<tr>
<td>Draft</td>
<td>10 percent</td>
</tr>
<tr>
<td>Final Draft</td>
<td>30 percent</td>
</tr>
<tr>
<td>Presentation</td>
<td>5 percent</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 percent</strong></td>
</tr>
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</table>

**Reading Reviews**

Your participation and responsibility with regard to preparation is expected - READ the ASSIGNED MATERIAL and COME TO CLASS PREPARED. To ensure that this expectation is met, you are required to submit, for selected assigned reading(s), a 1-2 page review which identifies and relates the main organizing points, principles, or themes corresponding it/them, any apparent contradictions or. Bring these reviews to class so that we will have the opportunity to consider your points and questions in discussion.

**Reading Reflections**

So that you may engage in more personal reflection over particular readings and material, you will be asked to prepare “reading reflections” for selected readings. These should range between 1 and 2 full pages of text, and rather than focusing on a review of the material these should articulate your own opinions, views, and ideas that emerged as you read the item(s).

**Essays**

You will also have the opportunity to practice your essay writing skills in conjunction with your reading of selected items. For the essays (which should range between 3 and 4 full pages of double-spaced text), you should develop and defend a central thesis or view that concerns or follows from the material you’ve digested.

**Paper**

This is a UM approved writing course, and a Dept. of Geography upper-division writing course. As such you are required to devote considerable energy to the preparation of a paper, and will be provided with considerable feedback on a draft of the paper prior to your submitting a final draft for a grade. In keeping with these expectations, we will devote some attention to the general topic of writing, you will be directed to the writing
center for assistance in the way of mechanics and organization beyond what I can provide you with, and we will have an orientation to the library’s resources for research.

The paper can be in the form of a research paper on a western water topic or issue that relies on primary or secondary sources of data/information, or it can take the form of a well researched and carefully composed and critical essay concerning a western water related topic or issue. Papers must be fully referenced, though the format for research papers and essays will vary considerably.

In addition to expanding on any of the topics covered in the course (see the provisional course schedule above) possible paper topics include:

- MWD – SOCAL; CA’s Central Valley Project
- Approaches to Floods
- The Columbia Basin Project
- Northwest Power Planning and Conservation Commission
- Salmon and Water Management
- Drought Policies
- Basin Case Studies (Columbia, Rio Grande, Colorado, Central Valley Project, Arkansas, Missouri, Platte, etc.).

**The paper & presentation must contain one or more maps appropriate to the topic chosen!**

**Format** - You should utilize the Turabian or Chicago Style for the formatting of your paper. The cover page should follow Turabian. See the Blackboard site for examples of citations relating to internet documents and materials. The paper should be no fewer than 10 full pages in length, and no greater than 15 full pages in length, excluding title page. Be sure that you provide double-spaced typewritten pages, with one inch margins and 12 pt. Font. This does not include title page, references, tables, and figures (these last three items should be appropriately labeled and attached at rear of paper).

**Paper grade** will be determined by: Strength of Thesis Statement, Intent, Objective – and how well these are met or supported; Quality of Writing (includes organization and mechanics of composition such as grammar, spelling, punctuation, structure); Quality of Research (content pertaining to topic, scope, and depth of analysis - descriptive papers are not enough); and Style (formatting, proper use of citations and references, etc).

**Evaluation of Writing**

All of your writings will be read and critically reviewed with respect to spelling, grammar, composition, voice, and strength and depth of research (where appropriate). Critiques will include comments and corrections, using standard editorial symbology outlined in the Rapid Guide to Revision, so that you can work to improve your reading, analysis, research, and writing skills as you progress through the course.

You are expected to incorporate any corrections and/or suggestions for revision into future work with the aim of improving your writing skills. You should employ the Rapid
Guide to Revision in reviewing the corrections and/or suggestions for revision, and are encouraged to visit with the instructor to discuss your reviewed works.

**Grading**

Though I will examine the distribution of course scores (totals) to ensure that it is an appropriate and fair one, I do not practice grading that contributes to “grade-inflation.” The best individual strategy to ensure that you receive a grade you can live with is to work to meet and/or exceed course requirements. Remember, A’s are rewards for Superior Performance, B’s for Above Average Performance, and C’s for Average Performance. Course grades will be based upon the following percentages of the total points possible for the course as weighted by the criteria specified in course requirements. *This class carries traditional grading and cannot be taken CR/NC.*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>≥93.0%</td>
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<tr>
<td>A-</td>
<td>90.0-92.9%</td>
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<tr>
<td>B+</td>
<td>87.0-89.9%</td>
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<tr>
<td>B</td>
<td>83.0-86.9%</td>
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<tr>
<td>B-</td>
<td>80.0-82.9%</td>
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<tr>
<td>C+</td>
<td>77.0-79.9%</td>
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<tr>
<td>C</td>
<td>73.0-76.9%</td>
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<tr>
<td>C-</td>
<td>70.0-72.9%</td>
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<tr>
<td>D+</td>
<td>67.0-69.9%</td>
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<tr>
<td>D</td>
<td>63.0-66.9%</td>
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<td>D-</td>
<td>60.0-62.9%</td>
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<tr>
<td>F</td>
<td>≤59.9%</td>
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**Additional Policies**

Late work will lose one-half a letter grade (i.e., A to A-) for each day late including weekends. Work is due at the start of class on day specified. Please do not make excuses for late work – I will need advance notification of any factors that will affect your ability to turn in work on time and/or to meet other course requirements. Save, back-up, and be prepared to submit digital (i.e., on disk) copies of any work produced during the semester in case of technology failures.

*I will not extend deadlines for individuals unless notified beforehand of the problem at hand. Be prepared to provide documentation for events leading to absences if you wish extensions.*

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

All students need to be familiar with the Student Conduct Code. The Code is available for review online at [http://www.umt.edu/SA/VPSA/index.cfm/page/1321](http://www.umt.edu/SA/VPSA/index.cfm/page/1321).

It is extremely disruptive to have students arrive late and/or leave early. I know that you have nothing else on your schedule during the class period, therefore your presence throughout the entire class period is expected. Not only will this keep me happy, it will help you to master the material.