University of Guelph - College of Biological Science - Department of Integrative Biology COURSE OUTLINE

Humans in the Natural World (BIOL*1500DE) – Winter 2014

Course Description

This course is designed for non-science students and will examine past and present human interactions with nature from an ecological and evolutionary perspective.

The major topics to be covered are...

- Academic Integrity
- Science and the Scientific Method
- Evolution and Natural Selection
- Species and Speciation
- Genetic Engineering
- Nutrients, Metabolism and Human Diet
- Photosynthesis and Global Warming
- Evolution and Disease
- Biodiversity and Conservation
- Population Ecology and Human Population Growth
- Tragedy, Games, and Triumph
- Course Summary and Review

Teaching Team

Instructors

marie Thérèse Rush, Department of Integrative Biology, University of Guelph, 519-824-4120 ext. 58379. Office hours: by appointment: <u>mrush@uoguelph.ca</u>; <u>biol1500@uoguelph.ca</u>

Carole Ann Lacroix, Department of Integrative Biology, University of Guelph, 519-824-4120 ext. 56444. Office hours: by appointment: <u>botcal@uoguelph.ca</u>

Teaching Assistants Tba

Course Materials

Required Textbooks

Biology: Science for Life, 4th edition. Authors: C. Belk and V. Borden Maier. Published by: Pearson Education Inc., 2013. To be purchased from the University Bookstore or elsewhere.

A Short Guide to Writing About Biology, 7th edition. Author: J.A. Pechenik. Published by: Pearson Education Inc., 2010 May be packaged with the textbook

DVD/video - An Inconvenient Truth, Author: A. Gore. To be purchased from the University Bookstore or elsewhere; also can be rented from local commercial outlets.

A note about external web pages

In each unit there are links to resources available on the internet. Please note that the instructors and the Department of Integrative Biology do not endorse nor are they responsible for the content of websites external to this course website.

Distance Education Course Scheduling Guidelines

Welcome to the Winter 2014 offering of Humans in the Natural World! We look forward to working with you this semester. Some of you are new to Distance Education, so here are a few important guidelines to give you a smooth start...

Check out the **Schedule**! It provides information and links to guide you through what you should be doing each week. Here you can find pages to read in the textbook, and links to the required and optional websites and other learning resources. Deadlines for the quizzes and debates can also be found here.

You should log into the course website on a regular basis. I'd suggest **logging in at least** every second day so that you can stay on top of things. You should read all of the News items that have been posted. This is where we post announcements that are relevant to everybody. For example, at the beginning of each week we will summarize what you should be doing, and we will also post important information about the debates and quizzes. You should also check the Main Class conference every time that you log in. You are responsible for information that is provided there as well as on the News page. Students will be posting questions about what they are working on, and you will likely be able to use the information too.

Keep up with your coursework. Take note of the deadlines, and plan your time accordingly. Ask questions when you can't find your answer in the News or Main Class conference! We are here to help you succeed.

Be sure to read over the outline, grading rubric and additional guidelines for the debates, and follow the guidelines carefully. Be familiar with the BIOL1500 DE style guidelines for in-text citations and references, and use them throughout. Be sure to paraphrase information from other sources, and acknowledge them appropriately. Writing style is also important; think about organization, conciseness, clarity, spelling, grammar, sentence structure...

Submit your quizzes and debate postings well in advance of the deadline. Don't wait until the last minute because you might run into computer problems.

Treat your classmates with respect and courtesy. Maintain a positive tone, and provide constructive feedback in the conferences.

Now that you know all of the basics, We hope that you will ENJOY the course!

marie Thérèse Rush & Carole Ann Lacroix

Learning Objectives

Below is a graphical representation of student learning outcomes for BIOL*1500DE. Content topics are listed in light blue boxes. The three main learning objectives are represented by light orange boxes while the modes for demonstrating competency in the objectives are placed below them and are represented by light green boxes.

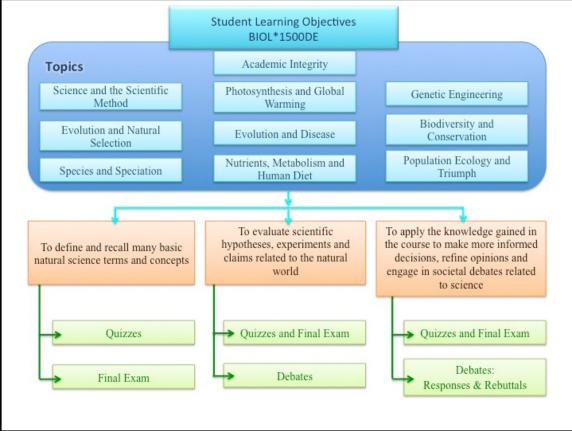


Figure 1: Learning Outcomes for BIOL*1500DE

Course objectives:

- To define and recall many basic natural science terms and concepts;
- To evaluate scientific hypotheses, experiments, and claims related to the natural world; and
- To apply the knowledge gained in the course to make more informed decisions, refine opinions, and engage in societal debates related to science.
- In addition to the overall course objectives you will find detailed learning objectives in the course notes for each unit on the course website.

Course Structure and Assessment

Course Structure

The course is divided into twelve units, with each unit taking one week to complete. In each unit you should...

- Read the course notes (found on the course website under the link for the appropriate Unit), required pages in the textbook, and other learning resources that are provided (e.g., websites, animations, articles, videos, podcasts, special learning tools) and make sure that you can achieve the learning objectives.
- Answer the study questions provided at the end of each section. These questions illustrate the type of information that you should be learning and will guide you through the learning resources in preparation for the quizzes and final exam.
- Complete the summary table. This table **will not** be submitted **nor** graded. It should simply be used for your study purposes.
- Review the Glossary of terms and use the online "Flashcards" to test your knowledge of the definitions.
- Vote in the Opinion Poll.

Tip: Remember to log on to the course at least twice a week, read the Main Class Conference Postings and the News section; check schedule for assignment due dates; work on your course units and on your debate topics as often as needed to keep up with your work.

Assessment Overview

30%
30%

Your performance in the course will be assessed through 3 online quizzes (worth 30%), 3 online debates (worth 30%), and the final exam (worth 40%).

Online Quizzes (worth 30%)

The online quizzes are designed to test your understanding of the course content in preparation for the final exam. Questions on the quizzes will be derived primarily from information in the course notes, textbook, glossary, and other required resources, e.g. online tutorials, Referencing Style Guidelines, animations, podcasts, e-reserve articles, and special learning tools. Each quiz will consist of a random selection of multiple choice questions from a large quiz bank. You will have ONE attempt to complete each quiz, and a time limit for each quiz will be calculated as 2.5 minutes per question. This time limit will be enforced, and at the time limit the quiz will be submitted automatically. At the completion of your quiz you will be able to see your grade. Within a week following the end of the quiz period, the questions you answered incorrectly will be released, so you will have an opportunity to learn from this assessment.

Each of the 3 online quizzes will be available for a one week period and must be completed by 11:59 PM on the due date. Late submissions will NOT be accepted and will receive a grade of zero. Please see the Schedule page for the dates that the quizzes are available and the due dates for each quiz.

Quizzes	Weight	Required Material	Number of Questions	Time Limit
Quiz 1	2%	Unit 1	22	0:55:00
Quiz 2	12%	Units 2, 3, 4	26	1:05:00
Quiz 3	16%	Units 5, 6, 7, 8	32	1:20:00

 Table 2: Online Quizzes Descriptions

Complete instructions for accessing the online quizzes, taking a quiz, and exiting a quiz can be found on the Quizzes page of the course website.

If you are writing your quiz and your computer or web browser freezes then you should close your browser in all applications, then log back in right away and complete your quiz. If you are still unable to complete your quiz you may need to shut down your computer and re-boot it. Note that once the clock has started to time your quiz it will continue to run, so it is imperative that you resume writing your quiz as soon as possible. If you still cannot log back into your quiz, you need to report your problem to the Distance Education Help Desk IMMEDIATELY so that the issue can be logged and verified by the Help Desk staff.

Online Debates (worth 30%)

Below is a graphical representation of student learning outcomes for Debates in BIOL*1500DE. Content topics are listed in light blue boxes. The mode for demonstrating competency in the subject matter is represented by the light orange box. Six main learning objectives are represented by light green boxes.

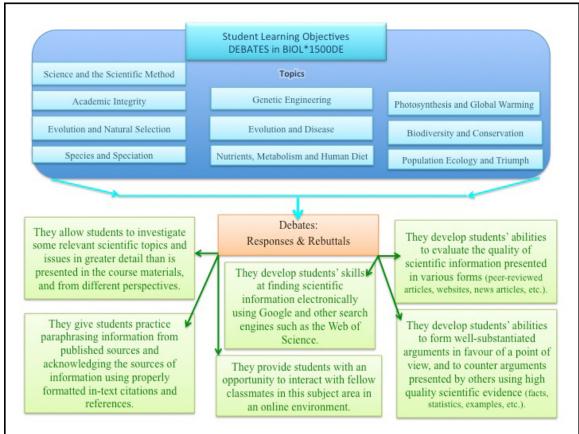


Figure 2: Learning Objectives covered by the Debates

Debate objectives:

- To allow you to investigate some relevant scientific topics and issues in greater detail than is presented in the course materials and from different perspectives.
- To develop your skill at finding scientific information electronically using Google and other search engines such as the Web of Science
- To develop your ability to evaluate the quality of scientific information presented in various forms (peer-reviewed articles, websites, news articles, etc.)
- To develop your ability to form substantiated arguments in favour of a point of view, and to counter arguments presented by others using high quality scientific evidence (facts, statistics, examples, etc.)
- To give you practice paraphrasing information from published sources and acknowledging the sources of your information using properly formatted in-text citations and references
- To provide you with an opportunity to interact with your classmates in this online environment.

Debate Guidelines and Resources

(available online under bar menu: Assessment)

- Debate Guidelines (Details about the debates.)
- Scientific reports (*Tips about what we mean by "high quality scientific evidence" to use in your debates.*)
- **Referencing Style Guidelines** (*Details about acknowledging your sources when writing the debates.*)
- Debate Grading Rubric (Specific Grading Criteria.)
- **TA Debate Grading Form** (*TAs will use this form when grading your response and rebuttal.*)

There will be three debates during the semester, and each student will submit one response and one rebuttal for each debate. The response is due before midnight on the Friday of the debate week, and the rebuttal is due before midnight Friday two weeks following. Please see the Schedule page for the dates that the debate responses and rebuttals are due.

All debate responses and rebuttals must be posted in the Debate Conference. This is essential so that your group members have an opportunity to read and respond to your postings. For grading purposes, all debate responses and rebuttals must be submitted, as Word documents [.doc or .docx file format] in the Dropbox, by the due date.

The 11:59 pm deadline will be strictly enforced, i.e., there will be no grace period. Debate postings must be submitted in both the debate conference AND on the Dropbox page to be accepted. Late submissions will be accepted for 24 hours after the deadline with a 10% late penalty. Submissions posted after the 24 hour late period will NOT be accepted and will receive a grade of zero.

Each response and rebuttal will be graded by the TAs following the Debate Grading Rubric. Since the debates are worth 30% of your final grade, each response and each rebuttal counts for 5%.

Final Exam (worth 40%)

The final exam will be a written, two hour exam (in person, not online) held during the exam period. Students taking the course from a distance may request to take the exam at an alternate location. The exam will consist of multiple choice questions based on all of the content covered in the course.

More details about the final exam will be provided on the course website towards the end of the semester.

Important Dates 2014

Jan. 6: First day of classes Jan. 10: Add period ends Jan. 14: Quiz I deadline Jan. 17:Debate Response 1 deadline Jan. 31: Debate Rebuttal 1 deadline Feb. 4: Quiz 2 deadline Feb. 7: Debate Response 2 deadline Feb. 17 – 21: Winter Break: No classes Feb. 28: Debate Rebuttal 2 deadline March 7: Course drop deadline (40th class day) March 11: Quiz 3 deadline March 14: Debate Response 3 deadline March 28: Debate Rebuttal 3 deadline April 4: Classes conclude April 7: Examinations commence April 21: Examinations conclude TBA: Final exam (Time and place TBA)

Course Policies

Asking Questions

This is a distance education course, and questions of a general nature about the course content, quizzes, debates, optional concept maps and final exam should be posted in the Main Class conference on the course website. The Main Class conference will be monitored by the instructors on a daily basis, Monday to Friday (excluding holidays) during normal working hours. Questions of a personal nature such as requests for extensions due to illness should be emailed to the instructor.

Appropriate Use of Conferences

This course has been designed to foster interaction between students and with the instructors. The conferences provide a means for course members to share ideas, opinions, and resources. The use of these computer conferences is a privilege, not a right, which may be revoked at any time for abusive conduct.

Please show respect for the opinions of others at all times, even if you do not agree with their ideas. We encourage you to disagree, critique and add new insights, but this must be done in a positive manner. Discussions in the online conferences must be treated the same as face to face discussion. In the conferences others cannot see such things as facial expression and body language, both of which we normally take into account when talking face to face with someone. Therefore, be very careful in the phrasing of your contributions and responses, as they may be interpreted differently than what you had intended. Please respect your fellow students. You MUST NOT post racist, sexist, homophobic, or other similar remarks that are likely to cause offence. Please keep in mind that the conferences are public places. Anyone with access to the course website has the capability of seeing conference postings.

Late Policies

All online quizzes must be completed by 11:59 p.m. Eastern Time on the due date. Late submissions will NOT be accepted and will receive a grade of zero.

Debate responses and rebuttals must be posted in the Debate Conference **AND** submitted in Word [.doc or .docx file format] in the Dropbox page before 11:59 pm on the due date.

The 11:59 pm deadline will be strictly enforced, i.e., there will not be any grace period. Late submissions will be accepted for 24 hours after the deadline with a 10% late penalty. Submissions posted after the 24 hour late period will NOT be accepted and will receive a grade of zero.

Assignment of Grades

Work in this course is evaluated according to the University of Guelph grading standards. For a definition of the numerical grades you receive please see Resolution 1 in the section on Grading Procedures under Grades in VIII: Undergraduate Degree Regulations and Procedures in the University of Guelph 2013-2014 Undergraduate Calendar.

See Resolution 1 under <u>Grading Procedures</u> in the Undergraduate Calendar for a description of grading standards used at the University of Guelph.

Grading rubrics will be used to illustrate the specific grading criteria used to evaluate the debates. These are available on the Assessment page under Debate Guidelines and Resources.

You may check your grades at any time during the semester through the Grades page on the course website.

Re-evaluation of Debates

If you have questions about the way your debate response or rebuttal was graded, please contact the TA who marked it by email. Their name and email address will be included with their feedback in the attachment on the Dropbox page. If you still have questions after discussing it with the TA then you should email the instructor. The instructor will take an independent look at the response or rebuttal, and your mark could go up or down as a result. All requests for re-grading MUST be made within one week of the return of the feedback.

Academic Consideration

If you miss deadlines for medical, psychological, or compassionate reasons, please contact the instructor as soon as possible to make alternate arrangements. For more details about academic consideration see the section on Academic Consideration, Appeals and Petitions in the University of Guelph 2013-2014 Undergraduate Calendar.

See the section on <u>Academic Consideration</u>, <u>Appeals and Petitions</u> for details regarding academic consideration.

Academic Integrity

Although we do encourage you to share thoughts and ideas while studying for the course, all material submitted for grading MUST BE YOUR OWN work! The University takes a serious view of academic misconduct, including plagiarism. The penalties for academic misconduct are severe and can lead to expulsion from the University and the revocation/rescinding of a degree.

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic

integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: Academic misconduct

Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Course Philosophy and Roles

Pedagogical Values

This course aims to support the mission statement and the learning objectives set out by the University of Guelph in the Undergraduate Calendar. This means that this course will be research intensive and learner-centered. Ultimately we want students to be capable of self-assessment, critical inquiry, and active learning.

Optional: Read the University of Guelph <u>Mission Statement</u> in the Undergraduate Calendar. *Optional:* Read the University of Guelph <u>Learning Objectives</u> in the Undergraduate Calendar.

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: Centre for Students with Disabilities website.

Teaching Philosophy

In support of the University Mission statement, we will adopt a learner-centered approach to teaching. In this course, that means that instructors are not the only ones responsible for depositing knowledge into the minds of students. Instead, you are expected to take an active role in your own learning. The instructors will provide opportunities for you to learn independently and from one another, and will coach you in the skills needed to do so effectively. Metaphorically speaking, the instructors will not be "the sage on the stage" but rather "the guide on the side", because research shows this method can lead to an increased motivation to learn, greater retention of knowledge and a deeper understanding of the material.

Instructor's Role and Responsibility to Students

In this course you can expect your instructors to...

- Clearly define the course learning objectives
- Provide well articulated activities that enhance learning
- Ensure timely and fair grading procedures
- Notify you of events, deadlines, announcements concerning grades, and other official information
- Provide and adhere to well defined policies and procedures as described in the course outline, the DE Handbook, and the Undergraduate Calendar
- Provide assistance, when asked, if you are having difficulties in the course
- Access the course website daily, Monday to Friday excluding holidays, to post course news updates and respond to questions in the conferences
- Reply to email correspondence in a timely fashion
- Foster and uphold an environment of academic integrity and a love of learning

Your Learning Responsibilities

Your success in this course depends on your response to the opportunities this course offers you. As a student in this course, you are responsible for...

- Knowing the course learning objectives
- Understanding and adhering to policies and procedures as described in the course outline, the DE Handbook and the Undergraduate Calendar
- Understanding grading procedures
- Contacting the course instructors if you are having difficulties in the course
- Accessing the course website at least 3 times per week to check course news updates, conference postings, and on-line resources
- Checking your email account (the one listed on the Class List) regularly for important communications from the course instructors or teaching assistants
- Reading the appropriate chapters of the textbooks, course notes, and other assigned resources on the course website and through e-reserve
- Reading all announcements and other class material distributed on-line
- Completing all required web activities, online quizzes, and online debates
- Familiarizing yourself with the course schedule of dates with particular attention to deadlines
- Initiating action, in advance of debate and quiz due dates, by consulting your instructor or program counsellor if extenuating circumstances affect your academic performance

- Understanding what constitutes academic misconduct and refraining from it
- Keeping a copy of your assignment work in paper or other reliable back-up form in case you are asked to resubmit your work.

E-mail Communication

As per university regulations, all students are required to check their <uoguelph.ca> email account regularly: e-mail is the official route of communication between the University and its students.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration: Academic Consideration.

Drop Date

The last date to drop one-semester courses, without academic penalty, for Winter 2014 is Friday, March 7, 2014. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar: <u>Drop Date</u>.

Advice and Study Tips

Advice and Strategies for Successful Performance

This course has been structured into 12 one-week units. Each unit focuses on a general issue of interest and builds on information found within the required readings. Each Unit on the course website will guide you through the appropriate material, providing you with specific learning objectives, key terms and concepts, resources, and study questions.

When you are reading the textbook and course notes, try to connect with what you're reading. That is, mark up or take note of sections of text that affect you, disturb you, excite you, or bore you. Mark passages that you do not understand with a question mark. Underline or highlight sentences that summarize key concepts. The important thing is to connect with what you're reading. Once you've marked up the chapter in this manner, go back over your notes. Do you understand all the concepts, or should you post a question to your classmates or the instructor? Do you agree with the authors or do you have counterarguments on some issues? Make note of the concepts or issues that link, bridge, or flow from one chapter to another.

We suggest the following orderly approach to the course to ensure that you don't miss something important. Access the course website at least 2 times per week and...

- Read the latest "News" messages on the Course Home page, and scroll down to ensure you have read all new messages since your previous sign on.
- Read the messages in the Main Class conference. This is where questions can be posted and the instructor will respond.

• Go to the Schedule and check out the "To Do" list for the week. Be sure that you have made a careful record of the due dates of the various activities so you get everything submitted on time.

You will need to work through this course based on the given time-line. We have tried to schedule the quizzes every couple of weeks to help you keep up with the course material. It is easy to procrastinate in an online course, but DON'T GIVE INTO THE TEMPTATION! The biggest trap you can fall into in a distance education course is to procrastinate and put off studying the material until next week, and then next week, and then next... Your ability to participate regularly is critical to your success in this course.

Estimation of Workload

This course requires approximately 10 hours of work per week to fulfill the course requirements. Approximately 5 hours per week will be required for reading and summarizing the course material, and 5 hours per week for preparing for and completing online debates and quizzes.

Technical Requirements

For adequate interaction with the course web site please make sure that your computer meets the minimum requirements.

See the recommended System Requirements for use with CourseLink.

If you do not have these technical requirements, consider either upgrading your personal computer, or using a machine on-campus. Trying to use someone else's computer for the course may prove to be frustrating and difficult.

Please follow this quick System Check to determine if you have the right setup. (Results will be displayed in a new browser window).

Do a <u>System Check</u> to make sure that your computer is configured properly for this course.

Problems, Questions, Comments

Course Related

Contact the instructors of this course [contact information given at the beginning of this course syllabus] (*if of a personal nature*) or post on the Main Class Conference.

Distance Education

Technical Support

Centre for Open Learning and Educational Support, University of Guelph, Room 211 Day Hall <u>help@coles.uoguelph.ca</u> (519) 824-4120 ext. 56939 Toll free: (Can. & US) 1 (866) 275-1478

Monday – Friday: 8:30 a.m. to 8:30 p.m. Saturdays: 10:00 a.m. to 4:00 p.m. Sunday 12:00 noon to 12: midnight

General Inquiries

Centre for Open Learning and Educational Support, University of Guelph, Room 160 Johnston Hall <u>info@coles.uoguelph.ca</u> (519) 824-4120 ext. 55000

Open Learning Program Counsellor

Mickey Smart (519) 824-4120 ext. 56050 msmart@uoguelph.ca

Course Evaluation information (from the CCS website)

CCS now provides the U of G Online Course Evaluation System in a secure, online environment. End of semester course and instructor evaluations provide students the opportunity to have their comments and opinions form part of the information used by Promotion and Tenure Committees in evaluating the faculty member's contributions in the area of teaching.

Course evaluations are now conducted through this web site. Login with your central email account login ID and password. <u>Course Evaluations</u>.

Please Note:

Instructors do **NOT** receive evaluations until the end of exam period. Furthermore, evaluations are anonymous, unless you specifically indicate you want to acknowledge your comments.

Table of Contents

University of Guelph - College of Biological Science - Department of Integrative Biology COURSE OUTLINE	
HUMANS IN THE NATURAL WORLD (BIOL*1500DE) – WINTER 2014	
COURSE DESCRIPTION	
ТЕАСНІНД ТЕАМ	
COURSE MATERIALS	1
DISTANCE EDUCATION COURSE SCHEDULING GUIDELINES	2
LEARNING OBJECTIVES	
Course objectives:	
COURSE STRUCTURE AND ASSESSMENT	
Course Structure	
Assessment Overview	
Online Quizzes (worth 30%)	
Online Debates (worth 30%)	
Debate objectives:	
Debate Guidelines and Resources	
FINAL EXAM (WORTH 40%)	
IMPORTANT DATES 2014	
Course Policies	
COURSE PHILOSOPHY AN ROLES	
Instructor's Role and Responsibility to Students	
Your Learning Responsibilities	
Advice and Study Tips	
Problems, Questions, Comments	13