

WAYNE COMMUNITY COLLEGE

PSY 150-01 General Psychology

Spring 2005

M W F Azalea 205 8:00-8:50 AM

Instructor Information

Instructor: Susan McClenny
Office Location: Azalea 314A
Telephone Numbers: 919-735-5151 ext 261
Office Hours: T: 11 AM-12 PM; M, W, Th, & F: 9-10 AM
E-Mail Address: suem@waynecc.edu
FAX Number: 919-731-2009

Course Description (CCL)

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

Semester hours: 3.0; Contact hours: 3.0

Prerequisite(s)

RED 090

Co-requisite(s)

None

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in analysis, interpretation, and communication necessary for transfer to a four-year institution.

Students enrolled in these programs will:

- Recognize characteristics of life-long learning: independent thinking, self-discipline, and ethical behavior
- Demonstrate the technological skills needed to advance academic pursuits at a senior institution
- Apply a set of analytical and problem-solving skills to real-world situations
- Demonstrate interpersonal skills that reflect an understanding of diversity and the need for teamwork
- Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods

Course Learning Outcomes

Upon successful completion of this General Psychology course, the student will demonstrate competency in the following areas:

- Define psychology and its goals; describe historical and modern approaches to the study of human behavior

- Define the scientific method and models used in psychology
- Discuss basic principles of sensation and perception.
- Recognize the roles that both the brain and heredity play in behavior
- Apply principles of learning and behavior modification in changing human and animal behavior
- Discuss how motivation guides and directs behavior
- Identify the major stages of development throughout the lifespan in addition to those factors that may hinder “normal” development
- Identify the major theories of personality and the ramifications of each theory’s “world view” as it pertains to psychological intervention
- Describe the concept of abnormal psychology and identify and differentiate between current specific psychological disorders and treatments/therapies
- Define social psychology and relate the major principles that govern interpersonal relationships

Required Textbook

Plotnik, R. (2005). Introduction to Psychology, (7th ed.). Belmont, CA: Wadsworth Thomson Learning. ISBN: 0-534-60278-9

Another source of information that you might find both interesting and helpful is the Wadsworth Publishing Company’s Internet Study Center. This website: (<http://psychology.wadsworth.com>) allows general access to both module-specific Practice Quizzes and Web Links of Interest that can be used to complement the text and classroom content.

A study guide to the text has been placed on reserve in the library for you to use.

Handouts and Powerpoint slides accessed through Blackboard.

Other Required Materials/Software

Notebook and paper for taking notes, pens, #2 pencils for test-taking, computer and Internet access for study guides and Internet assignments

Learning/Teaching Methods

Assigned readings, lectures, student discussions, class demonstrations, Internet assignments, videotapes, computer simulations, and collaborative projects.

Course Requirements / Methods of Evaluation

To demonstrate attainment of learning outcomes for PSY 150, the student must achieve an overall average of 70.

- | | |
|-----------------------------|--------------|
| 1. Seven tests | 60% of grade |
| 2. Oral/Written Assignment | 20% of grade |
| 3. Final comprehensive exam | 20% of grade |

Grading Policy/Criteria

The following ten-point grading scale will be used by the department.

100-90=A
89-80=B
79-70=C
69-60=D
Below 60=F

- **Tests** will be mostly multiple-choice questions; there may be some short-answer essay questions from time to time. ***Makeup tests, however, are comprised of short-answer, and essay questions only, and are somewhat harder than the original tests. Makeup tests may be taken in the Academic Skills Center up to one week after the originally scheduled test;*** if not taken by then, the chance to make up the test is forfeited. *Requests for a makeup test must be made via email, stating both the reason for missing the test and when you plan to take the makeup test.*

Academic Integrity Statement

See following link for the Academic Integrity Policy:

http://www.waynecc.edu/catalog/hb_html/studrights.htm Any student caught violating the WCC Code of Student Academic Integrity Policy, (i.e., cheating, plagiarizing, or other dishonorable acts), in academic work is subject to disciplinary action.

Students with Disabilities

WCC is committed to seeing that students with disabilities have equal access to and participation in all programs of study. For further explanation, please note the Students with Disabilities policy in the WCC catalog <http://www.waynecc.edu/catalog/studentlife.htm>, or the Student Handbook <http://www.waynecc.edu/studserv/disability/index.htm>.

Students with disabilities can contact the Disability Coordinator, Mrs. Caroline Smith, in the Student Development office, Room WLC 115, or at 919-735-5152, extension 223 or at csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, national origin, or physical or mental disability.

<http://www.waynecc.edu/catalog/cataloginfo.htm>

Student Attendance Policy

Attendance policy link for the college catalog and student handbook:

http://www.waynecc.edu/catalog/academic_regulations_p1.htm.

Wayne Community College expects students to gain skills, competencies, and an awareness of a workplace ethic that emphasizes responsibility and commitment.

The College believes students demonstrate responsibility for and commitment to their educational goals through regular attendance; therefore, students must attend 80% of the total hours of any class to receive a passing grade. Instructors will excuse no absences under this policy. Students must be present in at least one class during the first ten percent (10%) of the class in order to be considered enrolled in the class.

Students who miss more than 20% of the class meetings before the last date for dropping a course will receive a grade of "W". After the last date to drop, instructors will assign the grade of "WF." The last day for dropping the course in order to receive a "W" rather than "WF" is **March 24**. Therefore, a grade of "W" would be received if there were more than **10 absences** before **March 24**, and a grade of "WF" would be received if the 10 absences have been exceeded after **March 24**.

Instructors expect students to make up missed work, but students cannot make up absences.

*Please be respectful of your classmates AND your instructor, and be on time for class. **Please note that if you are late for class (that is, if you are not present by the time I finish calling the roll) OR if you leave class more than 10 minutes early, you will be counted absent.***

Additional Information From the Instructor

1. Phones/Pagers/Beepers

Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the learning/teaching process in the classroom, lab or library setting. Out of courtesy to others, all systems of communication should be in quiet position during instructional, lab or library time.

2. Disruptive students will be dropped from the class.
3. Read assignments and take notes *in your own words* while you read.
4. **I will provide study guides for each module; they can be found in Blackboard under "Course Documents". (A separate instruction sheet will be provided) I strongly recommend that you write out the answers in your notes soon after reading the module because ***you will be responsible for that material (on tests) even if it is not discussed in class.***
5. Do not hesitate to ask questions!!
6. Whenever possible, try to think of real-life examples of concepts we discuss. For example, when we study child development and look at the behavior of children in Piaget's sensorimotor stage of development, try to think of a child you know who is about the same age and relate his/her behavior to the characteristics Piaget described.
7. If you have difficulty with any aspect of this class, come to me right away. I will be more able to assist you at that point, rather than if you wait until the end of the course to report your concerns

Course Outline and Calendar

Module 1	Discovering Psychology	
Module 2	Psychology & Science	
	Test on Modules 1 & 2:	Jan. 24
Module 3	Brain's Building Blocks	
Module 4	Incredible Nervous System	
	Test on Modules 3 & 4:	Feb. 7
Module 5	Sensation	
Module 6	Perception	
	Test on Modules 5 & 6:	Feb. 21
Module 9	Classical Conditioning	
Module 10	Operant & Cognitive Approaches	
	Test on Modules 9 & 10:	March 7

March 8-11: SPRING BREAK!

Module 17	Infancy & Childhood	
	Group Paper Due: March 24	
Module 18	Adolescence & Adulthood	
	Test on Modules 17 & 18:	March 28
Module 19	Freudian & Humanistic Theories	
Module 20	Social Cognitive & Trait Theories	
	Test on Modules 19 & 20:	April 11
Module 22	Assessment & Anxiety Disorders	
Module 23	Mood Disorders & Schizophrenia	
	Test on Modules 22 & 23:	April 25
Module 15	Motivation	
Module 25	Social Psychology	

Final Comprehensive Exam: 8:00-9:50 AM, Thursday, May 5

WAYNE COMMUNITY COLLEGE

BIO 111-01 General Biology I

Spring 2005

10:00-10:50 am, M/W/F, Holly 214

Lab 2:00-4:50 pm M, Holly 214

Class Hours: 3

Lab: 3

Clinical/Wk Exp: 0

Semester Hours: 4

Instructor Information

Instructor: Gene Smith
Office Location: Holly 203
Telephone Numbers: 735-5151, ext. 727
Office Hours: MWF 9:00-9:50a.m., TTH 9:00-9:50a.m. and by appointment
E-Mail Address: gsmith@waynecc.edu
FAX Number: 919-736-9425

Course Description (CCL)

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics evolution, classification, and other selected topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences.

Prerequisite

None

Co-requisite

None

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in analysis, interpretation, and communication necessary for transfer to a four-year institution.

Students enrolled in these programs will:

1. Recognize characteristics of life-long learning: independent thinking, self-discipline, and ethical behavior.
2. Demonstrate the technological skills needed to advance academic pursuits at a senior institution.
3. Apply a set of analytical and problem-solving skills to real-world situations.
4. Demonstrate interpersonal skills that reflect an understanding of diversity and the need for teamwork.
5. Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods.

Course Learning Outcomes

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

1. Demonstrate knowledge of the basic principles of chemistry as they relate to atomic structure, the formation of chemical bonds, types of molecules and compounds and the classes, structures, and functions of biologically important molecules.
2. Demonstrate knowledge of cellular biology with emphasis on cell ultra-structure and function and selected aspects of cellular physiology.
3. Demonstrate knowledge of basic energy transformations in cells including the concept of free energy, laws of thermodynamics, ATP formation and function, and the processes of photosynthesis and cellular respiration.
4. Display competency in analyzing how cells reproduce for growth, repair, and gamete production.
5. Demonstrate knowledge of molecular genetics including nucleic acid structure, their role as informational molecules and the mechanisms of replication, transcription, translation, and gene expression.
6. Demonstrate knowledge of aspects of microbial genetics, viral replication, the role of viruses and oncogenes in cancer, mechanisms of gene expression in prokaryotic and eukaryotic cells and the procedures, products and current as well as future trends in biotechnology.
7. Demonstrate knowledge of Mendelian genetics by means of solving genetic problems and by application of important concepts including Mendel's laws and monohybrid and dihybrid crosses.
8. Demonstrate knowledge of modern genetics including multiple alleles and human blood group inheritance, gene interactions, sex determination, sex-linked inheritance, autosomal and sex chromosomal abnormalities.
9. Demonstrate knowledge of the mechanisms and components involved in the evolution of organisms.

Required Textbook

Textbook: *Biology*, by Campbell and Reece, 6th Edition published by Benjamin Cummings
ISBN 0-8053-6624-5.

Lab Manual : *Biology Laboratory Manual*, by Vodopich and Moore, 5th Edition published by McGraw-Hill Education ISBN 0-07-255287-5.

Other Required Materials/Software

None

Learning/Teaching Methods

Lectures, PowerPoint Presentation, Laboratory Experimentation, Demonstration

Course Requirements / Methods of Evaluation

Final grade will be determined by averaging 9 grades (on schedule):

- a. 6 lecture tests
- b. 1 Final Exam (not comprehensive)
- c. 1 Lab Practical Exam - (microscope misuse will result in penalty)
- d. Weekly lab grades, quizzes, homework assignments (Average)
- e. Research Paper – Bonus

Test Format (all or some of the following)

- a. Multiple Choice
- b. Matching
- c. True/False
- d. Short Answer
- e. Essay

Homework assignments or laboratory assignments are due at the beginning of the class period. Any assignment not turned in at the beginning of class will not receive credit. (This includes work turned in late because of an absence.)

Grading Policy/Criteria

Biology classes use a ten-point grading scale. Your instructor will use the following scale in determining your grade:

A =	100 – 90
B =	89 – 80
C =	79 – 70
D =	69 -- 60
F =	Below 60

Academic Integrity Statement

See your WCC Student Handbook or College Catalog for the WCC Code of Student Academic Integrity Policy. Any student caught violating the WCC Code of Student Academic Integrity Policy (i.e., cheating, plagiarizing, or other dishonorable acts), in academic work is subject to disciplinary action.

Students with Disabilities

WCC is committed to seeing that students with disabilities have equal access to and participation in all programs of study. For further explanation, please note the Students with Disabilities policy in the WCC catalog or the Student Handbook. Students with disabilities can contact the Disability Coordinator, Mrs. Caroline Smith, in the Student Development office, Room WLC 115, or at 919-735-5152, extension 223 or csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, age, national origin, or physical or mental disability.

Student Attendance Policy

We expect students at Wayne Community College to gain skills, competencies and an awareness of a workplace ethic, which emphasizes responsibility and commitment. The college believes students demonstrate responsibility for and commitment to their educational goals through regular attendance; therefore, students must attend 80% of the total hours of any class to receive a passing grade. Instructors will excuse no absences under this policy. Students who miss more than 20% of the class meetings before the last date for dropping a course will receive a grade of "**W**". After the last day to drop, instructors will assign the grade of "**WF**".

In Biology 111, **20** absences constitute over 20% of the classes. Missing lab counts as **3** absences. This means that you can have 19 absences, but 20 absences is one too many!

Instructors expect students to make up missed work, but students cannot make up absences. For example, if a student misses lab, he/she may make up the work at the instructor's convenience, but cannot substitute those hours for actual class time missed.

As mentioned above, instructors will excuse no absences under this attendance policy. Therefore, any quiz missed – announced or unannounced **will not be made up**. I will drop the **two** lowest quiz, homework, or lab grades for the semester. **I do not drop any major test grades!**

Additional Information From the Instructor/Miscellaneous

1. Students are encouraged to see Gene Smith for assistance on material that needs further explanation. Students can also visit the Academic Skills Center for assistance. The CD study guide that accompanies the book is very good for review and is strongly recommended.
2. Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the teaching/learning process. Out of courtesy to others, all systems of communication should be in quiet position during class.
3. There is to be no food or drink in the classroom.
4. There will be no sleeping in the classroom.
5. There will be no CD players, Walkmans, etc. in class. This is considered a disruption and you will be asked to leave.
6. I will not tolerate any unnecessary talking in class. If you disrupt the learning process of others, you will be asked to leave.
7. Cutting a test will not be tolerated unless the student has a very good excuse. The instructor should be notified the day of the test if the student is sick. Test must be made up within 24 hours after returning to school.
8. Students coming in tardy should check with the instructor after class to make sure they are not counted absent. Two tardies will be equivalent to 1 absence.
9. Cheating will not be tolerated! Any student caught cheating on any assignments or tests will receive an automatic "F" in the course. This includes copying old labs and labs from other students, talking during tests, wandering eyes, etc.
10. If you are absent and miss handouts presented to the class – those handouts are only available at my office. No handouts from previous classes are available during class. Ex. If you are absent, you must get those handouts before you enter the next class.
11. PowerPoint presentations are not printed for handout and are thus not available.

Course Outline

**BIOLOGY 111 (01)
LECTURE SCHEDULE
Spring Semester - 2005
Instructor: Gene Smith**

<u>Date</u>	<u>Topic</u>	<u>Suggested Readings</u>
January 7	Introduction	Chapter 1
January 10	Inorganic Chemistry	Chapter 2 (25-28)
January 12	Chemical Bonding	Chapter 2 (28-36)
January 14	Water	Chapter 3 (37-47)
January 19	Organic Chemistry	Chapter 4 (48-57)
January 21	Macromolecules	Chapter 5 (58-67)
January 24	Test # 1 (Chapters 1, 2, 3, 4, 5)	
January 26	Membrane Structure and Function	Chapter 8 (130-146)
January 28	Introduction to Cell Biology	Chapter 7 (102-111)
January 31	Cell Organelles and Functions	Chapter 7 (111-118)
February 2	Cell Organelles and Functions	Chapter 7 (119-129)
February 4	Test # 2 (Chapters 6^(Enzymes Lab), 7, 8)	
February 7	Animal Structure and Function (Lab)	Chapter 40 (778-791)
February 9	Introduction to Energy Transformations	Chapter 6 (83-91)
February 11	Photosynthesis -Introduction	Chapter 10 (168 -175)
February 14	Photosynthesis- Light Reactions	Chapter 10 (175 -180)
February 16	Calvin Cycle - C3 & C4 Pathways	Chapter 10 (181-187)
February 18	Cellular Respiration: Introduction	Chapter 9 (147-152)
February 21	Cellular Respiration: Glycolysis	Chapter 9 (153-156)
February 23	Krebs Cycle / Electron Transport Chain	Chapter 9 (157-162)
February 25	Anaerobic Respiration	Chapter 9 (162 -167)
February 28	Test # 3 (Chapters 6^(Energy), 9, 10)	
March 2	Mitotic Cell Cycle	Chapter 12 (206-224)
March 4	Meiosis and Sexual Life Cycles	Chapter 13 (226-235)
March 7	Genetic Variation	Chapter 13 (236-238)

March 14	Test # 4 (Chapters 12, 13)	
March 16	Introduction to Classical Genetics Mendelian Genetics - Monohybrid Crosses	Chapter 14 (239-244)
March 18	Test Cross, Dihybrid Crosses, Intermediate Inheritance, Partial/Incomplete Dominance, Probabilities	Chapter 14 (244-248)
March 21	Multiple Allele and Human Blood Groups Epistasis and other Gene Interactions	Chapter 14 (249-260)
March 23	Genetics Summary	
March 24	Last Day To Drop	
March 25	Test # 5 (Chapter 14, Genetic Crosses)	
March 28	History and Structure of DNA	Chapter 16 (278-283)
March 30	DNA Replication	Chapter 16 (284-293)
April 1	RNA, The Genetic Code, Transcription	Chapter 17 (294-303)
April 4	Transcription	Chapter 17 (294-303)
April 6	Translation	Chapter 17 (304-312)
April 8	Translation	Chapter 17 (304-312)
April 11	Mutations	Chapter 17 (312-314)
April 13	Test # 6 (Chapters 16, 17)	
April 15	Chromosomal Basis of Inheritance Sex and Inheritance, Recombination	Chapter 15 (268-270)
April 18	Chromosomal Abnormalities	Chapter 15 (271-277)
April 20	Microbial Genetics –Viral Structure	Chapter 18 (319-322)
April 22	Microbial Genetics –Viral Structure	Chapter 18 (319-322)
April 25	Lytic Cycle / Lysogenic Cycle	Chapter 18 (322-324)
April 27	Bacterial Genetics	Chapter 18 (330-336)
April 29	Gene Regulation - Operons	Chapter 18 (337-343)
May 2	Summary	
May 5 (01)	Final Exam (Chapters 15, 18, 20 + Laboratory Exercises) 10:00a.m. -- 12:00 p.m.	

BIOLOGY 111 (01)
LAB SCHEDULE
Spring Semester 2005
Instructor: Gene Smith

January 10	Lecture: Inorganic / Organic Chemistry	Chapter 2 (p.22-28)
January 24	Enzymes	Chapter 6 (p. 91-95) Exercise 10 (p.97-108)
January 31	Diffusion, Osmosis, Active Transport	Exercise 8 (p. 75 -81, 84-87) Chapter 8 (130-146)
February 7	Introduction to the Microscope	Exercise 2 (p. 9-21)
February 14	Cellular Structure	Exercise 3 (p. 23-36)
February 21	Animal Tissues	Exercise 40 (p. 423-435, 441-444)
February 28	Animal Tissues (cont.)	Exercise 40 (p. 423-435, 441-444)
	Mitosis (Lecture, Lab)	Chapter 12 (p. 206-224) Exercise 13 (p.423-435)
March 7	Meiosis	Chapter 13 (p. 226-235) Exercise 14 (p.143-152)
March 14	Laboratory Practical Exam Review	
March 21	Laboratory Practical Exam	
March 28	Classical Genetics Lab (Drosophila)	Handout
April 4	Mendelian Principles - Genetics Lab	Exercise 16 (p.161-169)
April 11	Biotechnology Lab # 1 (DNA extraction) PCR / DNA Amplification Digital Pipette "Practice"	Chapter 20 / Handout
April 18	Biotechnology Lab (Restriction Enzymes) (Gel electrophoresis)	Handout Exercise 6 (p.59-64)
April 25	Biotechnology Lab (Bacterial Transformation)	Exercise 15 (p.153-160) Handout
May 2	Biotechnology Lab	

BIO 111
General Biology I
Competency Statement

Course Competency Statement:

Upon satisfactory completion of the tasks and activities for Biology I, the student will have demonstrated competency by knowledge of general principles of biology. This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics evolution, classification, and other selected topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.

Subcompetency I

The student will demonstrate knowledge of the basic principles of chemistry as they relate to atomic structure, the formation of chemical bonds, types of molecules and compounds and the classes, structures, and functions of biologically important molecules.

Task 1

Given a combination of questions, the student will be able to identify or define terminology concerned with basic concepts in chemistry, including atom, element, molecule, compound, and chemical bond.

Task 2

Given a question, the student will be able to describe atomic structure giving its components and associated terminology, and discuss factors that determine the chemical activity and properties of elements.

Task 3

Given a combination of questions, the student will be able to describe the formation of ionic, covalent, and hydrogen bonds with appropriate examples.

Task 4

Given a combination of questions, the student will be able to list the basic chemical characteristics and biological functions of carbohydrates, lipids, proteins, and nucleic acids.

Task 5

Given a combination of questions, the student will be able to describe enzyme structure, function, and means of regulation of enzyme activity citing specific examples.

Subcompetency II

The student will demonstrate knowledge of cellular biology with emphasis on cell ultrastructure and function and selected aspects of cellular physiology.

Task 1

Given charts, models, diagrams, electron photomicrographs, and lecture-discussions, the

student will be able to identify and give the function(s) of the various organelles found in "typical" plant and animal cells.

Task 2

Given a combination of questions, the student will be able to draw, label, and discuss the components of the membranes of cells according to the fluid mosaic model.

Task 3

Given a combination of questions, the student will be able to list and discuss the various mechanisms involved in the movement of molecules into and out of cells noting the structural aspects of the cell membrane that assist in these mechanisms.

Task 4

Given a question, the student will be able to compare and contrast features of prokaryotic and eukaryotic cells.

Task 5

Given a hypothetical cell and solution, the student will be able to discuss the concept of osmosis using the appropriate terminology in describing the osmotic condition of the solution and the cell and describing the events that would take place.

Task 6

Given a combination of questions, the student will be able to list, describe, give the location of and function(s) of the different types of plant and animal tissues.

Subcompetency III

The student will demonstrate knowledge of basic energy transformations in cells including the concept of free energy, laws of thermodynamics, ATP formation and function, and the processes of photosynthesis and cellular respiration.

Task 1

Given a list of terms, the student will be able to define and discuss the concepts of free energy, entropy, the laws of thermodynamics, oxidation, and reduction.

Task 2

Given a combination of questions, the student will be able to discuss the involvement of Adenosine Triphosphate (ATP) in energy production in the cell and the mechanisms of photophosphorylation, substrate phosphorylation, the Calvin Cycle, the location of and the components involved in this process.

Task 3

Given a combination of questions, the student will be able to discuss and give examples of C3 and C4 plants as to structural differences and mechanisms of carbon dioxide fixation.

Task 4

Given a combination of questions, the student will be able to summarize the major events of the aerobic and anaerobic reactions of cellular respiration accounting for the components involved, the number of hydrogens trapped and ATP's formed in each process, and the location of the events.

Task 5

Given a series of questions, the student will be able to trace the pathway by which carbohydrates, lipids, and proteins are fed into the events of aerobic respiration for energy production.

Subcompetency IV

The student will display competency in analyzing how cells reproduce for growth, repair, and gamete production.

Task 1

Given a textbook, slides, other visual aids, and a laboratory exercise, the student will discuss the cell cycle, identify mitotic phases, list advantages and disadvantages of asexual reproduction, and explain its basic significance. The student will also compare and contrast the differences in plant and animal cytokinesis.

Task 2

Given a textbook and visual aids, the student will assess the adaptive significance of sexual reproduction, list its advantages and disadvantages, describe stages in meiosis, compare and contrast mitosis and meiosis, and compare and contrast spermatogenesis and oogenesis.

Subcompetency V

The student will demonstrate knowledge of molecular genetics including nucleic acid structure, their role as informational molecules and the mechanisms of replication, transcription, translation, and gene expression.

Task 1

Given a combination of questions, the student will be able to describe, compare and contrast the structure, composition and functions of DNA (deoxyribonucleic acid) and RNA (ribonucleic acid).

Task 2

Given a list of scientists, the student will be able to trace the history of molecular genetics and describe their contributions to this field.

Task 3

Given a combination of questions, the student will be able to discuss the mechanisms and components involved in DNA replication.

Task 4

Given a combination of questions, the student will be able to discuss the mechanisms and components involved in transcription and RNA processing.

Task 5

Given a combination of questions, the student will be able to discuss the genetic code and complementarity as it relates to the sequence of nucleotides on the DNA molecule and to codons on mRNA molecules and anticodons on tRNA molecules.

Task 6

Given a combination of questions, the student will be able to describe the process of protein synthesis (translation) as to all components involved and to the major steps of initiation, elongation, and termination.

Task 7

Given a combination of questions, the student will be able to discuss the consequences of mutation on gene expression including the causes and effects of point and frameshift mutations and the types of mutagenic agents (mutagens).

Subcompetency VI

The student will demonstrate knowledge of aspects of microbial genetics, viral replication, the role of viruses and oncogenes in cancer, mechanisms of gene expression in prokaryotic and eukaryotic cells and the procedures, products and current as well as future trends in biotechnology.

Task 1

Given a combination of questions, the student will be able to list and discuss the various types of recombinations that can occur in prokaryotic cells including transformation, conjugation, transduction and lysogenic conversion.

Task 2

Given a combination of questions, the student will be able discuss transposable genetic elements (transposons) as to their composition and their effects on prokaryotic cells.

Task 3

Given a combination of questions, the student will be able to compare and contrast with examples, viral replication in DNA viruses, RNA viruses and Retroviruses.

Task 4

Given a combination of questions, the student will be able to discuss oncogenic viruses, oncogenes and the possible ways that they may cause the transformation of a normal cell into a tumor cell.

Task 5

Given a combination of questions, the student will be able to describe various mechanisms of the control of gene expression in prokaryotic cells including inducible operons and corepressible operons.

Task 6

Given a combination of questions, the student will be able to describe the mechanisms involved in the control of gene expression in eukaryotic cells including methylation, amplification, induction, as well as pre- and post-transcriptional modification.

Task 7

Given a combination of questions, the student will be able to describe the various tools and techniques involved in biotechnology including DNA fingerprinting, gene cloning, PCR, gel electrophoresis, various blotting techniques and the current and future products and benefits of biotechnology.

Subcompetency VII

The student will demonstrate knowledge of Mendelian genetics by means of solving genetic problems and by application of important concepts including Mendel's laws and monohybrid and dihybrid crosses.

Task 1

Given a combination of questions, the student will be able to identify and/or define with examples, basic genetics terminology including genotype, phenotype, homozygous, allele, heterozygous, dominant, and recessive.

Task 2

Given a combination of questions, the student will be able to state Mendel's Laws of Inheritance and explain each using appropriate examples.

Task 3

Given a combination of genetics problems, the student will be able to work, solve and predict percentages and ratios of offspring of monohybrid crosses with complete dominance.

Task 4

Given a combination of genetics problems, the student will be able to work, solve and predict percentages and ratios of offspring of monohybrid crosses with incomplete dominance (intermediate inheritance) and lethal genes.

Task 5

Given a combination of genetics problems, the student will be able to work, solve, and predict percentages and ratios of dihybrid crosses with complete dominance.

Task 6

Given a combination of genetics problems, the student will be able to work, solve, and predict percentages and ratios of offspring of dihybrid crosses with single and double incomplete (partial) dominance.

Subcompetency VIII

The student will demonstrate knowledge of modern genetics including multiple alleles and human blood group inheritance, gene interactions, sex determination, sex-linked inheritance, autosomal and sex chromosomal abnormalities.

Task 1

Given the blood groups of two parents, the student will be able to work, solve and give the percentage and ratio of blood groups that will appear in their progeny.

Task 2

Given a combination of questions, the student will be able to discuss human blood groups as to types, means of inheritance, the Rh factor and blood incompatibilities resulting in hemolytic diseases of newborns.

Task 3

Given a combination of genetics problems, the student will be able to work, solve, and predict the percentage and ratio of offspring of crosses involving gene collaboration, epistasis, and complementary genes.

Task 4

Given a combination of questions, the student will be able to discuss sex determination, sex chromosomes, sex linked traits, dosage compensation and the Lyon Hypothesis.

Task 5

Given a combination of problems, the student will be able to work, solve, and predict the percentages or ratios of offspring in sex-linked inheritance.

Task 6

Given a combination of questions, the student will be able to describe the procedure for performing a karyotype to determine the chromosome composition of an individual.

Task 7

Given a combination of questions, the student will be able to discuss and explain how nondisjunction, deletion, translocation, inversion, duplication, and transposition may result in chromosome abnormalities in humans.

Task 8

Given a combination of questions, the student will be able to discuss the cause and characteristics of human chromosome disorders including Klinefelter's Syndrome, Turner's Syndrome, Down's Syndrome, Triplo-X (mets) females, XYY males, monosomy and trisomy.

Subcompetency IX

The student will demonstrate knowledge of the mechanisms and components involved in the evolution of organisms.

Task 1

Given a combination of questions, the student will be able to discuss a brief history of important contributions to evolution, citing biologists and their theories.

Task 2

Given a combination of questions, the student will be able to describe factors influencing population evolution including gene allele/genotype frequency, genetic drift, gene flow, mutations, nonrandom mating, natural selection, and the Hardy-Weinberg Theorem

Task 3

Given a combination of questions, the student will demonstrate a knowledge of factors influencing speciation including reproductive barriers, geographical isolation, sympatric speciation and population genetics.

Assessment of Overall Competency in General Biology I:

In order to establish competency in General Biology I, the student must have an overall average of 70% on lecture tests and the final exam. Lecture tests and a final examination consisting of multiple-choice questions, matching, terms to identify and/or define, short answer discussion questions, essay questions, and genetics problems will be given to students throughout the course. Each of these tests will count equally resulting in the total average for the final grade.

WAYNE COMMUNITY COLLEGE

Eng 111-05 Expository Writing

Fall 2004

9:00, M/WF, DOG 206

Class Hours: 3

Lab: 0

Clinical/Wk Exp: 0

Semester Hours: 3

Instructor Information

Instructor: Daniel Rollins
Office Location: DOG 317
Telephone Numbers: 735-5151, ext. 320
Office Hours: M/W/F 10-11; T/H 9:30-10:30
E-Mail Address: drollins@wcc.edu

Course Description (CCL)

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English.

Prerequisite

ENG 090 (C or better) or appropriate score on English placement test (AW = 44+, COMPASS = 71+) and RED 090 or appropriate score on reading placement test (AW = 42+, COMPASS = 80+)

Co-requisite

None

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in analysis, interpretation, and communication necessary for transfer to a four-year institution.

Students enrolled in these programs should be able to do the following:

1. Recognize characteristics of life-long learning: independent thinking, self-discipline, and ethical behavior
2. Demonstrate the technological skills needed to advance academic pursuits at a senior institution
3. Apply a set of analytical and problem-solving skills to real-world situations
4. Demonstrate interpersonal skills that reflect an understanding of diversity and the need for teamwork
5. Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods

Course Learning Outcomes

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

1. Recognize and use the key elements of sentence structure, especially those relevant to writing coherent, multi-paragraph papers
2. Recognize and use the components of effective essay development
 - a. Recognize, analyze, and correct errors in thesis statements, outlines, and multi-paragraph papers
 - b. Construct an acceptable thesis statement and outline for a five-paragraph essay
 - c. Develop at least two unified, coherent five-paragraph essays using a predetermined

- method of development
- d. Identify and correct errors in your own five-paragraph essays
- 3. Recognize and use the components of effective critical writing
 - a. Construct an acceptable thesis statement and outline for a multi-paragraph critical essay
 - b. Demonstrate the ability to analyze and use quotations in your writing
 - (1) Choose effective quotations
 - (2) Incorporate the quotations in a critical essay
 - (3) Document the quotations accurately
- 4. Explore cultural diversity by analyzing a number of diverse reading selections

Required Textbook

The Sundance Writer: A Rhetoric, Reader, Handbook, 2nd ed., by Mark Connelly, published by Heinle & Heinle,

A Pocketful of Prose: Vintage Short Fiction, vol. II, by David Madden, published by Heinle & Heinle

These two books are shrink-wrapped together and have a single ISBN: 0-8384-0545-2.

Other Required Materials/Software

A good college dictionary

Wayne Community College cover sheets

A 3.5 HD computer disk

A thesaurus (optional)

Learning/Teaching Methods

Lectures, student discussions, collaborative work, and writing assignments

Course Requirements / Methods of Evaluation

To demonstrate attainment of learning outcomes for ENG 111 and to go on to ENG 113 or ENG 114, you must achieve an overall average of 78 or better. To achieve these learning outcomes, you must successfully complete the following:

1. One expository essay
2. One critical essay
3. One essay whose method of development will be determined by the instructor
4. At least two tests

Grading Policy/Criteria

Language and Communications classes use a seven-point grading scale. Your instructor will use the following scale in determining your grade:

A	=	100 – 93
B	=	92 – 85
C	=	84 – 78
D	=	77 - 70
F	=	Below 70

Assignments are due at the beginning of the class period. Work turned in at the end of class (or later) will not be accepted. **When you miss a class or classes, you are responsible for the work you miss.**

Therefore, you should make arrangements with the instructor to make up the work as soon as possible. Your instructor may impose a time frame for completing the work.

Academic Integrity Statement

If you are caught taking possession of any academic material (test information, research papers, notes, etc.), giving help during a test, or submitting papers and reports as original work when they are not entirely your own work, you are guilty of academic dishonesty. This conduct will result in a failing grade on the assignment or test in question.

Students with Disabilities

If you have a physical or learning disability, you should contact the Disability Coordinator, Mrs. Caroline Smith, WLC 115, call 735-5152, ext. 223, or e-mail csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, age, national origin, or physical or mental disability.

Student Attendance Policy

The college considers regular class attendance essential to good scholarship and to a workplace ethic that emphasizes responsibility and commitment. Therefore, you must attend 80% of the total hours of this class to receive a passing grade. Your instructor will excuse no absences. If you miss more than 20% of the class meetings (10 hours) before the last day for dropping a course, you will receive a grade of W. After the last day to drop, you will receive a WF.

You cannot make up an absence but will be expected to make up any work you miss. When you miss a class, you should check with another student or your instructor to find out about assignments made while you were absent and have them completed by the date they are due.

You should come to class on time and should not ask to leave early. If you are late, you will be counted absent unless you ask your instructor after class to have the absence changed to a tardy. Three tardies will be counted as one absence. If you are more than ten minutes late or leave class more than ten minutes early, you will be counted absent.

Additional Information From the Instructor/Miscellaneous

1. Phones/Pagers/Beepers

Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the teaching/learning process. Out of courtesy to others, all systems of communication should be in quiet position during class.

WAYNE COMMUNITY COLLEGE
His 122 – 01 Western Civilization II
Spring 2005

MWF 12:00 – 12:50

Instructor Information

Instructor:	Tracey Ivey
Office Location:	Azalea 324
Telephone Numbers:	919-735-5151 ext 326
Office Hours:	MWF 11:00 – 12:00 TTH 10:00 – 11:00
E-Mail Address:	ivey@waynecc.edu
FAX Number:	919-731-2009

Course Description (CCL)

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

Contact Hours 3 Semester Credit Hours 3

Prerequisite(s)

RED 090

Co-requisite(s)

None

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in **analysis, interpretation, and communication necessary for transfer to a four-year institution.**

Students enrolled in these programs will:

Recognize characteristics of life-long learning: independent thinking, self-discipline, and ethical behavior

Demonstrate the technological skills needed to advance academic pursuits at a senior institution

Apply a set of analytical and problem-solving skills to real-world situations

Demonstrate interpersonal skills that reflect an understanding of diversity and the need for teamwork

Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods

Course Learning Outcomes

Upon completion of this course, you will be able to do the following:

1. Identify the components of the Enlightenment period.
 - a. Identify important historical figures and places relevant to the Enlightenment period.
 - b. Analyze significant political, socioeconomic, and cultural effects of the Enlightenment period.
2. Identify the components of the Scientific Revolution.
 - a. Identify important historical figures and places relevant to the Scientific Revolution.
 - b. Analyze significant political, socioeconomic, and cultural effects of the Scientific Revolution.
3. Identify the components of the Industrial Revolution.
 - a. Identify important historical figures and places relevant to the Industrial Revolution.
 - b. Analyze significant political, socioeconomic, and cultural effects of the Industrial Revolution.
4. Identify the components of the French Revolution.
 - a. Identify important historical figures and places relevant to the French Revolution.
 - b. Analyze significant political, socioeconomic, and cultural effects of the French Revolution.
5. Identify the components of the Post-Napoleonic period in Europe
 - a. Identify important historical figures and places relevant to Post-Napoleonic Europe.
 - b. Analyze significant political, socioeconomic, and cultural effects of the Post-Napoleonic period in Europe.
6. Identify the components of the World Wars.
 - a. Identify important historical figures, places, and battles relevant to the events leading up to the World Wars.
 - b. Analyze significant political, socioeconomic, and cultural effects of the World Wars.
7. Identify the components of the Cold War Era.
 - a. Identify important historical figures and places relevant to the Cold War.
 - b. Analyze significant political, socioeconomic, and cultural effects of the Cold War period.

Required Textbook(s)

The Western Heritage by Kagan Vol. II or Combined Brief Edition
4th edition

Other Required Materials/Software

Notebook and Pen/Pencil. # 2 Pencil must be used for tests.

Learning/Teaching Methods

Lectures, Assigned Readings, Internet Assignments, and Collaborative Projects

Course Requirements / Methods of Evaluation

To demonstrate attainment of learning outcomes for HIS 122 the student must achieve an overall average of 70.

- | | |
|------------------------|-----------------------------|
| 1. Three Tests | 60% of grade |
| 2. Collaborative paper | 10% of grade |
| 3. Final Exam | 30% of grade |
| 4. Extra Credit | 5 pts added to a test grade |

Grading Policy/Criteria

The following ten-point grading scale will be used by the department.

- 100-90=A
- 89-80=B
- 79-70=C
- 69-60=D
- Below 60=F

Test 1 and 2 can be taken if missed. The format of a Make Up Test is essay.

Academic Integrity Statement

See following link for the Academic Integrity Policy:

http://www.waynecc.edu/catalog/hb_html/studrights.htm Any student caught violating the WCC Code of Student Academic Integrity Policy, (i.e., cheating, plagiarizing, or other dishonorable acts), in academic work is subject to disciplinary action.

Students with Disabilities

WCC is committed to seeing that students with disabilities have equal access to and participation in all programs of study. For further explanation, please note the Students with Disabilities policy in the WCC catalog <http://www.waynecc.edu/catalog/studentlife.htm>, or the Student Handbook <http://www.waynecc.edu/studserv/disability/index.htm>.

Students with disabilities can contact the Disability Coordinator, Mrs. Caroline Smith, in the Student Development office, Room WLC 115, or at 919-735-5152, extension 223 or at csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, national origin, or physical or mental disability.

<http://www.waynecc.edu/catalog/cataloginfo.htm>

Student Attendance Policy

Attendance policy link for the college catalog and student handbook:

http://www.waynecc.edu/catalog/academic_regulations_p1.htm

Wayne Community College expects students to gain skills, competencies, and an awareness of a workplace ethic which emphasizes responsibility and commitment.

The College believes students demonstrate responsibility for and commitment to their educational goals through regular attendance; therefore, students must attend 80% of the total hours of any class to receive a passing grade. Instructors will excuse no absences under this policy. Students must be present in at least one class during the first ten percent (10%) of the class in order to be considered enrolled in the class.

Students who miss more than 20% of the class meetings before the last date for dropping a course will receive a grade of "W". After the last date to drop, instructors will assign the grade of "WF."

Instructors expect students to make up missed work, but students cannot make up absences.

Three Tardies equals one absence.

Additional Information From the Instructor/Miscellaneous

1. Phones/Pagers/Beepers

Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the learning/teaching process in the classroom, lab or library setting. Out of courtesy to others, all systems of communication should be in quiet position during instructional, lab or library time.

Course Outline

- Unit 1: The Age of Absolutism and Enlightenment
 - Chapt. 12 The Age of Religious Wars
 - Chapt. 13 Paths to Constitutionalism and Absolutism

- Chapt. 14 New Directions in Thought
- Chapt. 15 Successful and Unsuccessful Paths to Power
- Chapt. 16 Society and Economy Under The Old Regime
- Chapt. 17 The Transatlantic Economy, Trade Wars, and Colonial Rebellion
- Chapt. 18 The Age of Enlightenment
- Unit 2: The French Revolution and Post-Napoleonic Europe
 - Chapt. 19 The French Revolution
 - Chapt. 20 The Age of Napoleon
 - Chapt. 21 The Conservative Order and The Challenges of Reform
 - Chapt. 22. Economic Advance and Social Unrest
 - Chapt. 23 The Age of Nation-States
 - Chapt. 24 The Building of European Supremacy
 - Chapt. 25 Birth of Modern European Thought
- Unit 3: Renaissance, Reformation, and European Exploration
 - Chapt. 26 Imperialism, Alliances and War
 - Chapt. 27 Political Experiments of the 1920s
 - Chapt. 28 Europe and the Great Depression
 - Chapt. 29 World War II
 - Chapt. 30 The Cold War Era and the Emergence of the New Europe
 - Chapt. 31 The West at the Dawn of the Twenty-First Century

WAYNE COMMUNITY COLLEGE
HUM 110-02 - Technology and Society
Spring 2005
MW – 12:00 – 1:20 P.M – Dogwood 215

Instructor Information

Instructor: Margaret Baddour
Office Location: Dogwood 315
Telephone Numbers: 735-5151 – Ext.760
Office Hours: MWF – 11:00 – 12:00
E-Mail Address: mbb@waynecc.edu
FAX Number: 919-731-2009

Course Description (CCL)

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

Prerequisite(s)

RED 090

Co-requisite(s)

None

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in analysis, interpretation, and communication necessary for transfer to a four-year institution.

Students enrolled in these programs will:

Recognize characteristics of life-long learning: independent thinking, self-discipline, and ethical behavior

Demonstrate the technological skills needed to advance academic pursuits at a senior institution

Apply a set of analytical and problem-solving skills to real-world situations

Demonstrate interpersonal skills that reflect an understanding of diversity and the need for teamwork

Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods

Course Learning Outcome

Upon successful completion of this Humanities course, the student will demonstrate competence in the following areas:

- Recognize the importance of history, the arts, philosophy and other areas that have an impact on the human condition.
- Experience the connection between culture and community through museum visits, concerts, theatre performances and the support of local artists.
- Recognize that while the arts do not change, science constantly changes, and discoveries and inventions become outmoded.
- Recognize technological developments and their impact on society.
- Recognizes that every piece of technology a human being uses changes the human being.
- Understand the causes and consequences of technological change.
- Recognize the societal effects of technology, both positive and negative.
- Understand that a study of the humanities provides opportunities to become more capable in thought, judgment, communication, appreciation and action.
- Understand that “while a study of an engine enables one to better understand, design, build, or repair an engine, the study of the humanities enables one to better understand, design, build or repair a human life.” (Edwin Delattre in Perceiving the Arts)
- Recognize the problems of human diversity in a technological society and the adjustments necessary to achieve a unified society.

Other Required Materials/Software

One report cover (heavy paper – no plastic)

Learning/Teaching Methods

Lectures, student discussions, collaborative work, writing assignments, and journals.

Course Requirements / Methods of Evaluation

Example: To demonstrate attainment of learning outcomes for Hum 110. The student must achieve an overall average of 78.

- | | |
|-----------------------------|------------------|
| 1. Journals | 33-1/3% of grade |
| 2. Mid-Term and Final Exams | 33-1/3% of grade |
| 3. Class Participation | 33-1/3% of grade |

Grading Policy/Criteria

The following ten-point grading scale will be used by the department.

- 100-90=A
- 89-80=B
- 79-70=C
- 69-60=D
- Below 60=F

Academic Integrity Statement

See following link for the Academic Integrity Policy:

http://www.waynecc.edu/catalog/hb_html/studrights.htm Any student caught violating the WCC Code of Student Academic Integrity Policy, (i.e., cheating, plagiarizing, or other dishonorable acts), in academic work is subject to disciplinary action.

Students with Disabilities

WCC is committed to seeing that students with disabilities have equal access to and participation in all programs of study. For further explanation, please note the Students with Disabilities policy in the WCC catalog <http://www.waynecc.edu/catalog/studentlife.htm>, or the Student Handbook <http://www.waynecc.edu/studserv/disability/index.htm>. Students with disabilities can contact the Disability Coordinator, Mrs. Caroline Smith, in the Student Development office, Room WLC 115, or at 919-735-5152, extension 223 or at csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, national origin, or physical or mental disability.

<http://www.waynecc.edu/catalog/cataloginfo.htm>

Student Attendance Policy

Attendance policy link for the college catalog and student handbook:

http://www.waynecc.edu/catalog/academic_regulations_p1.htm.

Wayne Community College expects students to gain skills, competencies, and an awareness of a workplace ethic which emphasizes responsibility and commitment.

The College believes students demonstrate responsibility for and commitment to their educational goals through regular attendance; therefore, students must attend 80% of the total hours of any class to receive a passing grade. Instructors will excuse no absences under this policy. Students must be present in at least one class during the first ten percent (10%) of the class in order to be considered enrolled in the class.

Students who miss more than 20% of the class meetings before the last date for dropping a course will receive a grade of "W". After the last date to drop, instructors will assign the grade of "WF."

Instructors expect students to make up missed work, but students cannot make up absences.

Each instructor has the prerogative of setting policy regarding tardiness to class.

Additional Information From the Instructor/Miscellaneous

Phones/Pagers/Beepers

Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the learning/teaching process in the classroom, lab or library setting. Out of courtesy to others, all systems of communication should be in quiet position during instructional, lab or library time.

Course Outline and Calendar

Class calendar with topics, films and field trips to be distributed.

WAYNE COMMUNITY COLLEGE

Mat 070 - 01 – Introductory Algebra

Fall 2004 – August to December

M – F, 8:00 – 8:50, Hocutt 230

Class Hours: 3

Lab: 2

Clinical/Wk Exp: 0

Semester Hours: 4

Instructor Information

Instructor: Katina P. Davis
Office Location: Dogwood 322
Telephone Numbers: 735-5151 x 704
Office Hours:
E-Mail Address: kdavis@waynecc.edu

Course Description (CCL)

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

Prerequisite(s)

Mat 060 (C or better) or placement

Co-requisite(s)

Red 080 or placement

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in analysis, interpretation, and communication necessary for transfer to a four-year institution.

Students enrolled in these programs will:

1. Recognize characteristics of life-long learning: independent thinking, self-discipline, and ethical behavior.
2. Demonstrate the technological skills needed to advance academic pursuits at a senior institution.
3. Apply a set of analytical and problem-solving skills to real-world situations.
4. Demonstrate interpersonal skills that reflect an understanding of diversity and the need for teamwork.
5. Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods.

Course Learning Outcomes

The student will demonstrate competency in Math 070 by being able to:

1. perform basic arithmetic operations on real numbers using the properties of real numbers and the order of operations.
2. evaluate and simplify algebraic expressions using such algebraic basics as properties of signed numbers, exponents, and combining like terms.
3. solve linear equations and inequalities.
4. use formulas to solve applications problems, including problems involving length, angles, and basic geometric shapes.

5. graph linear equations and linear inequalities.
6. solve problems involving the basic properties of lines, such as slope and intercepts.
7. add, subtract, multiply, and factor polynomial expressions using the basic properties of exponents.

Required Textbook

Essential Mathematics/Introductory Algebra, by Tobey/Slater and Martin/Gay, published by Prentice Hall Publishing Company. ISBN: 0-536-66272-X

Required Materials

Notebook, pencil, and TI-83 Graphing calculator

Learning/Teaching Methods

Lectures, student discussions, labs, and cooperative learning lab activities

Course Requirements / Methods of Evaluation

To demonstrate attainment of learning outcomes for MAT 070, you must achieve an overall average of 70 or better. To achieve these learning outcomes, you must successfully complete the following:

- | | |
|------------------|--------------|
| 1. Chapter tests | 60% of Grade |
| 2. Labs | 20% of Grade |
| 3. Final exam | 20% of Grade |

Grading Policy/Criteria

Math classes use a ten-point grading scale. Your instructor will use the following scale in determining your grade:

A =	100 – 90
B =	89 – 80
C =	79 – 70
D =	69 -- 60
F =	Below 60

Assignments are due at the beginning of the class period. Work turned in at the end of class (or later) may receive a reduction in grade. Work turned in late because of an absence may also receive a reduction in grade. **When you miss a class or classes, you are responsible for the work you miss.** Therefore, you should make arrangements with the instructor to make up the work as soon as possible. Your instructor may impose a time frame for completing the work.

Academic Integrity Statement

See your WCC Student Handbook or the College catalog for the WCC Code of Student Academic Integrity Policy. Any student caught violating the WCC Code of Student Academic Integrity Policy, (i.e., cheating, plagiarizing, or other dishonorable acts), in academic work is subject to disciplinary action.

Students with Disabilities

WCC is committed to seeing that students with disabilities have equal access to and participation in all programs of study. For further explanation, please note the Students with Disabilities policy in the WCC catalog or the Student Handbook. Students with disabilities can contact the Disability Coordinator, Mrs. Caroline Smith, in the Student Development office, Room WLC 115, or at 919-735-5152, extension 223 or csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, national origin, or physical or mental disability.

Student Attendance Policy

The college considers regular class attendance essential to good scholarship and to a workplace ethic that emphasizes responsibility and commitment. Therefore, you must attend 90% of the total hours of this class to receive a passing grade. Your instructor will excuse no absences. If you miss more than 10% of the class meetings (8 hours) before the last day for dropping a course, you will receive a grade of W. After the last day to drop, you will receive a WF.

You cannot make up an absence but will be expected to make up any work you miss. When you miss a class, you should check with another student or your instructor to find out about assignments made while you were absent and have them completed by the date they are due.

You should come to class on time and should not ask to leave early. If you are late, you will be counted absent unless you ask your instructor after class to have the absence changed to a tardy. Three tardies will be counted as one absence. If you are more than ten minutes late or leave class more than ten minutes early, you will be counted absent.

Additional Information From the Instructor/Miscellaneous

- 1. Phones/Pagers/Beeper:** Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the learning/teaching process. Out of courtesy to others, all systems of communication should be in quite position during class.
- 2.** No eating or drinking in the classroom.
- 3.** No sleeping in classroom.
- 4.** No CD players, Walkmans, or other electronic devices in class. This will count as a disruption and you will be asked to leave.
- 5.** No unnecessary talking in class. If you disrupt the learning process of others, you will be asked to leave.
- 6.** To test in ASC, you must have a valid WCC student ID card.
- 7. Retests:** You must have your instructor's permission to retest on a Chapter test. You must complete the retest within one week and you should make test corrections on the test prior to retesting.
- 8.** As situations arise, changes in policies and procedures will be announced in class, and you will be held accountable for these changes.

Course Outline and Calendar

Chapter	Topics
1	Review of Real Numbers
2	Equations, Inequalities, and Problem Solving
4	Exponents and Polynomials
5	Factoring Polynomials
3	Graphing
7	Further Graphing
Final Exam	

WAYNE COMMUNITY COLLEGE
Mat 110-01 Mathematical Measurements
Fall 2004
1:00, M-Th, DOG 207

Class Hours: 2	Lab: 2	Clinical/Wk Exp: 0	Semester Hours: 3
-----------------------	---------------	---------------------------	--------------------------

Instructor Information

Instructor:	Peggy Womble
Office Location:	DOG 319
Telephone Numbers:	735-5151 ext. 308
Office Hours:	
E-Mail Address:	pwomble@waynecc.edu
FAX Number:	919-736-9425

Course Description (CCL)

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

Prerequisite(s)

MAT 070 (C or better) or appropriate scores on placement tests

Co-requisite(s)

None

Program Learning Outcomes

The Associate Degree Programs in arts, science, and fine arts prepare students to transfer to a four-year college for a baccalaureate degree (B.A. or B.S.). Graduates of these two-year programs complete the academic requirements and develop the skills in analysis, interpretation, and communication necessary for transfer to a four-year institution.

Students enrolled in these programs should be able to do the following:

1. Demonstrate the knowledge and skills characteristic of life-long learning: independent thinking, self-discipline, and ethical behavior.
2. Develop the technological skills needed to advance academic pursuits at a senior institution.
3. Develop a set of analytical and problem solving skills that can be applied to real-world situations.
4. Demonstrate interpersonal skills that reflect an understanding of diversity, the need for teamwork, and the global nature of society.
5. Communicate information to a variety of audiences using appropriate written, spoken, and/or visual methods.
6. Be prepared to pursue advanced studies at a senior institution.

Course Learning Outcomes

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

1. Perform basic arithmetic computations using real numbers, order of operations, and the substitution principle.

- a. Add, subtract, multiply, and divide arithmetic expressions using real numbers.
 - b. Apply the order of operations.
 - c. Evaluate algebraic expressions and formulas involving real numbers.
 - d. Solve linear equations.
 - e. Solve related applications.
2. Use ratios, proportions, and percents.
 - a. Calculate ratios.
 - b. Solve proportions.
 - c. Calculate percents
 - d. Solve applications of simple and compound interest, buying on credit, credit card interest, and home buying using ratio, proportion, or percents.
 3. Compute perimeter, area, and volume of geometric figures within the English system and the metric system.
 - a. Compute the perimeter of squares, rectangles, triangles, circles, and other geometric figures.
 - b. Compute the area of squares, rectangles, triangles, circles, and other geometric figures.
 - c. Compute the volume of cylinders, prisms, cones, pyramids, and spheres.
 - d. Take direct measurements and solve trade applications of perimeter, area, and volume.
 - e. Estimate in the English and metric systems.
 - f. Convert units within the English system.
 - g. Convert units within the metric system.
 - h. Convert from metric units to English units and vice versa.
 4. Convert and estimate in the apothecary and avoirdupois systems.
 5. Use the basic tools of statistics to interpret collected data.
 - a. Compute the mean, median, mode, and standard deviation of data.
 - b. Make tables or graphs for data.
 - c. Determine a mathematical model that best fits collected data and make predictions based on the model.

Required Textbook(s)

Mathematics: Its Power and Utility, 7th edition by Karl J. Smith, published by Thomson & Brooks/Cole.
ISBN: 0-534-38636-9

Other Required Materials/Software

A calculator, preferably a TI-83 graphics calculator, is required for this course.

Learning/Teaching Methods

Lectures, student discussions, and collaborative work will be used as teaching methods.

Course Requirements / Methods of Evaluation

To demonstrate attainment of learning outcomes for Mat 110, you must achieve an overall average of 70 or better. To achieve these learning outcomes, you must successfully complete the following:

- | | |
|---------------------|--------------|
| 1. Chapter tests | 60% of grade |
| 2. Labs and quizzes | 20% of grade |
| 3. Final exam | 20% of grade |

Grading Policy/Criteria

The Math Department uses a ten-point grading scale. Your instructor will use the following scale in determining your grade:

- A = 100 – 90
B = 80 – 89

C = 70 – 79
D = 60 – 69
F = Below 60

Assignments are due at the beginning of the class period. Work turned in at the end of the class (or later) will receive a 10-point penalty in the grade. Work turned in late because of an absence will also receive the 10-point penalty. **When you miss work because of an absence, it will be treated as a dropped assignment. You are allowed 3 dropped grades on labs or quizzes. If you miss a test, the final exam will be used to replace the missed test grade.**

Academic Integrity Statement

If you are caught cheating during a test or quiz, you are guilty of academic dishonesty. This conduct will result in a 0 on the quiz or test in question, and this grade may not be dropped.

Students with Disabilities

Students with disabilities can contact the Disability Coordinator, Mrs. Caroline Smith, in the Student Development office, Room WLC 115, or at 919-735-5152, extension 223 or at csmith@waynecc.edu.

Non-Discriminatory Statement

Wayne Community College is committed to a policy of providing educational opportunities to all students regardless of economic or social status, beliefs, sexual orientation, national origin, or physical or mental disability.

Student Attendance Policy

Wayne Community College considers regular class attendance essential to good scholarship and to a workplace ethic that emphasizes responsibility and commitment. Therefore, you must attend 80% of the total hours of this class to receive a passing grade. Your instructor will excuse no absences. If you miss more than 20% of the class meetings (12 absences) before the last day for dropping a course, you will receive a grade of W. After the last day to drop, you will receive a WF.

Additional Information From the Instructor/Miscellaneous

1. Phones/Pagers/Beepers

Cell phones, beepers, and walkie-talkies cause unnecessary disruption to the learning/teaching process in the classroom, lab or library setting. Out of courtesy to others, all systems of communication should be in quiet position during instructional, lab or library time.