NEW YORK CITY COLLEGE OF TECHNOLOGY The City University of New York School of Arts & Sciences Department of Social Science Course Outline

Course code: GEOG 1101 Course title: Elements of Physical Geography Class hours/credits: 3 class hours, 3 credits Prerequisite: Eligibility for ENG 1101 Pathways: Scientific World

Catalog Description: A survey of key elements of physical geography presented in the context of human activity and its relation to the physical world. Topics include world surface features, climate and weather, the seas, and natural resources.

Course Description:

The elements of geography which relate to the human habitats; the physical-biotic systems which constitutes the natural surroundings of humans: surface features, climate, the seas, and the natural resources. All elements of the course are interpreted with reference to mankind and global patterns rather than specific areas.

Suggested Text:

Strahler, Alan. Introducing Physical Geography 6th ed. NY: John Wiley & Sons, Inc., 2013.

* *The textbook used in a particular section will be chosen by the instructor.*

Learning outcomes	Assessment Methods*	
Students will be able to read various types of maps and to understand the symbols on these maps.	Map quizzes and Class discussions	
Students will be able to identify the forces that cause the seasons, climate and local weather.	Student observation journal and class discussions	
Students will be able to discuss the physical forces which have shaped and continue to shape the Earth's surface.	Quizzes and exams	
Students will be able to identify the various cli- mate regions of the world and appreciate the ef- forts of humans to adapt to the environment of each region.	Quizzes and class discussions of museums visits	

Course Content Learning Outcomes

Students will be able to discuss how the physical and climatic environment affects the society, economy and culture in various parts of the world.	Class discussions, Article review and exams
Students will be able to use vocabulary common to geography and to be able to explain various ge- ographical and environmental problems in both written and spoken exercises.	Class discussions, quizzes, student observation journals and exams
Students will be able to discuss the current debate about global environmental issues, including the problem of global warming and the "greenhouse effect."	Class discussions and exams

* may vary slightly per instructor to suit their own needs

Pathways Scientific World Leaning Outcomes

1.	Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to	
	analyze problems and develop solutions.	
2.	Articulate and evaluate the empirical evidence supporting a scientific or formal theory.	
3.	Understand the scientific principles underlying matters of policy or public concern in which science plays a role.	

Learning Outcomes	Assessment Methods*
KNOWLEDGE: Students should understand the role of scientific research in understanding the physical and natural world.	Students will examine various types of geographi- cal maps, charts and tables from such sources as the National Oceanic and Atmospheric Administra- tion.
SKILLS: Students should demonstrate a basic competency in the use of scientific language.	Class lectures, discussion, and textbook reading.
INTEGRATION: Students should be able to conduct basic research and be able to catalog that research in writing.	Students will also keep a written journal in which they record personal bi-weekly geographic obser- vations. For example, students will observe the movement of the sun at a single point in the sky over the course of the semester.

General Education based learning outcomes

VALUES, ETHICS, AND RELATIONSHIPS: Students should understand the significance of ethical conduct in scientific research.	Students will complete an "Article Review" as- signment twice a month. Students will select a cur- rent article from a science journal, or The New York Times "Science" section, or another major newspaper and write critical reviews of the articles they have selected.
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SCOPE OF COURSE ASSIGNMENTS*

- Three quizzes worth a total of 5% each and three exams worth 20% each: These assignments will be comprised of identification and short answer questions.
- An Observation Journal worth 15%.
 - Over the course of the semester you need to keep an observational journal. Find a small notebook that you can dedicate to this exercise, and remember to put your name on it. This journal is not an optional assignment but an important part of your grade. You need to start it at the beginning of the semester, keep it up to date, and you need to take it seriously. The assignment requires you to do different types of activities and to develop different skills. Work hard on all parts. *Effort and attention to detail count*. You have three types of things that you need to write up in this journal, full explanations are given below.
 - Twice a month sunlight observation
 - Twice a month review of an article from the Science Times about something that relates to what we are learning
 - Every week 1 free observation from nature
 - Article Reviews: Twice a month you should select a current article from the New York Times Science section (it's on Tuesdays), or other reputable newspaper or science journal. You can read the physical paper or read it on line, but you should give all the proper bibliographic information at the top, including: the title, author and date of the article and where you got it (New York Times, National Geographic...etc). Summarize it briefly and then comment on why you selected it and how you feel it fits in with our studies. You should start this the week of Feb 14.
 - Free Observation: Once a week, (you can do more) you need to examine some aspect of the physical natural world. On the page for that day's observation put the date, note the time of day and the weather as you would for any science lab. Then start your observation. You can select rocks to look at; animals, plants, frost on your car, the way nature and the urban environment co-inhabit a space, that's up to you. You can trace leaves and flowers, sketch clouds, describe or draw the rain and snow. What will be important is not how well you draw or sketch, but rather your powers of observation. Each observation (and there can be several on a page or only one, or many a week, that's up to you), should include a sketch or drawing (in any material you favor, pencil,

pen, paint, color or black and white), a verbal description of what it is you've selected and your thoughts about it (along with the aforementioned date, time, and weather). You can include poetry, yours or something you find (but make sure the citations are there if it's not yours). Here again, the important part is to pick things that relate to what we are learning in class and to make that connection explicit.

- A museum assignment worth 10%.
 - As part of this class you will be required to make a visit to the American Museum of Natural History. The Museum is located on Central Park West at 79th St. You can get there on the C or the B train which stops right at the museum or by taking the 1/9 to Broadway and 79th and then walking over. The museum has a suggested donation policy, so you can pay whatever you wish [1\$, 5\$ etc] for their regular exhibits. If you want to see some of the more special exhibits you have to pay more money. For the purposes of this assignment, you do not need to pay the special admission price. The Museum is open daily, 10:00 a.m.-5:45 p.m.

You will need to visit 3 of the museum's galleries for this assignment. They are all located on the first floor of the museum and are: The Hall of Biodiversity, The Hall of Ocean Life, and The Gottesman Hall of the Planet Earth. You might also find it interesting to go and explore the Rose Gallery and the Heilbrun cosmic pathway as well as the area on the environment of New York State, but you must visit the other three halls for this assignment.

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CityTech Grade Schedule

Letter Grade	<u>Number Grade</u>
А	100-93
A-	92.9-90
B+	89.9-87
В	86.9-83
B-	82.9-80
C+	79.9-77
С	76.9-70
D	69.9-60
F	59.9-0

ATTENDANCE POLICY

It is the conviction of the Department of Social Science that a student who is not in a class for any reason is not receiving the benefit of the education being provided. Missed class time includes not just absences but also latenesses, early departures, and time outside the classroom taken by students during class meeting periods. Missed time impacts any portion of the final grade overtly allocated to participation and/or any grades awarded for activities that relate to presence in class.

Instructors may including a reasonable "Participation" grade into their final grade calculations for this course.

ACADEMIC INTEGRITY POLICY

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalog.

STUDENT ACCESSIBILITY

City Tech is committed to supporting the educational goals of enrolled students with disabilities in the areas of enrollment, academic advisement, tutoring, assistive technologies, and testing accommodations. If you have or think you may have a disability, you may be eligible for reasonable accommodations or academic adjustments as provided under applicable federal, state, and/ or city laws. You may also request services for temporary conditions or medical issues under certain circumstances. If you have questions about your eligibility and/or would like to seek accommodation services and/or academic adjustments, please email the <u>Student Accessibility Center</u>.

COMMITMENT TO STUDENT DIVERSITY

The Department of Social Science complies with the college wide nondiscrimination policy and seek to foster a safe and inclusive learning environment that celebrates diversity in its many forms and enhances our students' ability to be informed, global citizens. Through our example, we demonstrate an appreciation of the rich diversity of world cultures and the unique forms of expression that make us human.

SAMPLE SEQUENCE OF TOPICS AND TIME ALLOCATIONS*

Weeks 1-3

The Solar System

• Students will acquire an appreciation of the complexities of our solar system and the

earth's place in it. The student will be able to explain the reasons for the change in seasons and the basis for the calendar and a twenty-four hour day and how the earth's tilt and the elliptical orbit around the sun influences these factors.

Quiz #1-Week 3 Readings: Strahler, Prologue & Chapters 1-3 <u>Weeks 4-6</u>

Weather

• Students will study the influence on the earth's atmosphere and will be able to explain in an essay or discussion the statement that the sun is the source of the earth's energy and be able to show how this energy affects all the earth's atmosphere.

Exam #1-Week 6 Readings: Strahler, Chapters 4-7

<u>Weeks 7-9</u>

The Earth's Waters:

• Students will understand and be able to explain in an essay the importance of the world's oceans in the development of the earth's weather and as a moderator of the world's climate. The student will be able to illustrate the hydrologic cycle.

Quiz #2-Week 8 Readings: Strahler, Chapters 8-11

Weeks 10-12

Landforms:

• Students will be familiar with a generalized model of the earth's structure and the various forces that have modified the earth's surface. The following terms will be able to be explained: mantle cove, Mohole, tectonic Volcanism, fault, diostrophism, metamorphic, igneous.

Exam #2-Week 10 Museum Assignment-Week 12 Readings: Strahler, Chapters 12-15

Weeks 13-15

The Global Environment in the 21st Century

- Students will examine and discuss:
 - Distribution of natural resources in the first, second and third world and conflicts over resources
 - Industrial nations and pollution of the environment
 - Global Warming and the "Greenhouse effect"

Quiz #3-Week 13 Exam #3-Week 15 Observational Journals Due Week 14 Readings: Strahler, Chapters 16-19

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Reviewed/revised by Stephanie Boyle, Ph.D. Date: December, 2015 Revised by Peter Parides in Spring 2021