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| **Course Name: Earth’s Physical Realms** |
| **Course Code:** **GEOG/ENVR – 210** | **Course Type (general)** | **Course Credits: 3** |
| **Class Timings:** **11:00 a.m.– 12:15 p.m.****(Tuesday & Thursday)** **E 242**  | **Section: A** | **Student Meeting Hours/ Office Hours:****12:00 a.m.–12:50 a.m. (Monday, Wednesday, Friday) or appointment through email.** |
| **Instructor Name: Kashif Shafique Chair, Department of Geography** |
| **A Note from the Instructor:**I am serving at Forman Christian College (A Chartered University) since 2003 when this prestigious institution was denationalized and later became the Chairperson in 2009. My teaching philosophy and style have been shaped by my real-life experiences, particularly during the period of my graduation when I was inspired by my Geography Teacher Prof. Mutahir Rizvi. He is no more with us but the knowledge he imparted among his students is immortal. Teaching and learning for me are cooperative acts. The teacher not only imparts knowledge but also prepares and motivates students to accept and learn skills for future life. I believe from what I have gained from education that teachers do not transmit only academic information but social and personal life skills as well. University teaching is therefore about equipping students with the skills they will need to navigate the uncharted journey of adult life. It is more than teaching content but also about teaching habits of thinking and habits of being. I, therefore, consider training in critical thinking as an important part of preparing students for the personal, occupational and political challenges they would soon come to experience in society.The flow of this course uses a F2F session/on-campus learning activities. This course will have regular weekly class discussions and activities, scheduled in in-class sessions and as well as readings and course materials that each of student is required to keep on top of each week. As you get started, I'll answer any questions as they arise. Please post your questions in the appropriate discussion forum or discuss Face to Face session of your class. |
| **Instructor Contact Details**Email: kashifshafique@fccollege.edu.pk (Ext. # 648)**Office Hours In-person in E-239 or (online zoom meeting):** Topic: Student Consultancy Hour Spring 2023Time: **12:00 a.m.–12:50 a.m. (Monday, Wednesday, Friday) or set your time by email.**Join Zoom Meeting<https://us04web.zoom.us/j/83374895480?pwd=Z1FHOHVDNkpVTXRDcjdtSXdpbERCZz09> **Meeting ID: 833 7489 5480 Passcode: dz7btg** |
| **Course Description**:No Pre-requisites.This course expresses about the spatial and functional dynamics of major physical phenomena relating to the planet Earth - its evolution, interior state, atmosphere, lithosphere, hydrosphere, and ecosphere. It further explores physical phenomena and related cycles, and man-environment interactions. The course introduces scientific investigations, methods, observations, and communication along with common tools and methods used for understanding Earth and its environments.  Minerals and rocks that make up the Earth's crust, Earth's features, identification, and uniqueness as a planet are also covered in this course. Students will also examine continental drift, seafloor spreading, plate tectonic movement, plate boundaries, landforms, volcanic activity, earthquakes, and mountains resulting from plate tectonic processes as well as surface processes that create and modify landforms. The course also explores water on earth, covering its distribution, states, and the processes involving Earth’s water. Students will learn how features and processes of the atmosphere determine weather and climate, how life is supported on planet Earth, and how Earth scientists learn about Earth's past as well as Earth’s history. The course continues with human dependence on natural resources for energy and materials, the effects of human overpopulation and overconsumption on Earth's systems, and concludes with introducing the objects of our solar system and explorations beyond our solar system.This course includes a broad series of lessons and activities that offer a variety of modalities for ultimate student engagement and content retention. Each unit contains a series of lessons that include an introduction of content, a virtual demonstration of that content, and repeated opportunities to practice that content, along with assignments, quizzes, case studies, and a final exam at the end of the course.**Mode of Instruction:** In-person F2F session on campus.***Keep checking your emails for Moodle notifications*** |
| **Course Objectives or Student Learning Outcomes(SLOs)**Upon successful completion of the course, the students will be able to: * Building perspective about physical domains of the Earth (Atmosphere, Lithosphere, Hydrosphere, and Biosphere).
* Explain the causes of Tectonic Plates Movements and Resultant landforms.
* Discuss the function, temperature profile, and composition of the atmosphere.
* Analyze patterns and consequences of human-environment interaction

 **Course Content, Learning Material & Activities Schedule**

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| **Wk.** | **Topic/ Title** | [**Teaching-Learning Activities**](https://docs.google.com/document/d/1jY2UWb3QuOogkiSMdPvZd33eKe2kRpfzsTm2LSrnLko/edit#heading=h.4dy4q49omahn) | [**Assessment**](https://docs.google.com/document/d/1Z4W_utaHpwMJP6B2jJlb9ofxFHmcagrWWOT5cUM9lj4/edit?usp=sharing)**&** [**Rubrics**](https://docs.google.com/document/d/1IdFfZ8WRSRKSceBYC4jfAyKEYdb1M6Z4GSSLueP8HD0/edit)(with the due date) |
| **Synchronous** |
| In-Person |
| 1 | Introduction; Syllabus and Policies | *Presentation / Lecture**Q&A* | Reading: Home Reading (introduction of course activity) |
| Geography as a Spatial Science | *Presentation / Lecture**Q&A* | Reading: Home Reading |
| 2 | General Features of the Planet and its Movements. | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Rocks; Materials of the Lithosphere, Rock Cycle | *Presentation / Lecture**Q&A* | Assignment 1: Delivered |
| 3 | Earth’s Interior | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Plate Tectonics & Associated Structural Features. | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading; Quiz announced  |
| 4 | Introduction; Syllabus and Policies | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Geography as a Spatial Science | *Presentation / Lecture**Q&A* | Assignment: Submitted  |
| 5 | General Features of the Planet and its Movements. | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Rocks; Materials of the Lithosphere, Rock Cycle | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| 6 | Earth’s Interior | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Plate Tectonics & Associated Structural Features. | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading;  |
| 7 | Formation processes of Macro Landforms | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| History of the Atmosphere. Constituents and vertical structureWeather and Climate System, its Elements | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading; Quiz conducted  |
| 8 | Formation processes of Macro Landforms | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity  |
| History of the Atmosphere. Constituents and vertical structureWeather and Climate System, its Elements | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| **MIDTERMS**  |
| 9 | Insolation, Energy Heat and BudgetPressure and Air Circulation, Cyclones and Storms - an introduction | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity (Review of Mid Term) |
| Weathering, Mass Wasting, and Erosion | *Presentation / Lecture**Q&A* | Assignment 2: Delivered |
| 10 | Sculpturing by Glaciers, Surface Runoff & Winds Action | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Introduction to Marine Masses; Distribution of Land and WaterSea Waves, Ocean Currents, Tides | *Presentation / Lecture**Q&A* | Case study/ Research paper delivered |
| 11 | Introduction to Earth’s Biomes.Human Environment InteractionsEnvironmental Problems | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Insolation, Energy Heat and BudgetPressure and Air Circulation, Cyclones and Storms - an introduction | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| 12 | Weathering, Mass Wasting and Erosion | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Sculpturing by Glaciers, Surface Runoff & Winds Action | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| 13 | Introduction to Marine Masses; Distribution of Land and WaterSea Waves, Ocean Currents, Tides | *Presentation / Lecture**Q&A* | Lecture & Discussion; Reading: Home Reading/Class Activity |
| Introduction to Earth’s Biomes.Human Environment InteractionsEnvironmental Problems | *Presentation / Lecture**Q&A* | Assignment 2+Presentation: Submitted  |
| 14 | The Forum; Review of the Course | *Presentation / Lecture**Q&A* | Case study/ Research paper submission through Turnitin |
| 15 | **Presentations on Project/Case study** |

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### **Textbooks, Materials, Supplies and other Resources** (please see links given above for OERs and Technology tools)

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| **Title** | **Earth Science** |
| Author | Lutgens, Frederick K. |
| Publisher | Upper Saddle River, NJ: Prentice Hall, c1997 |
| Call No | 550 T179E 1997 |

**Recommended Readings**

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| **Title** | **Physical Geography** |
| Author | [Strahler, Alan H.](http://libraryportal.fccollege.edu.pk:80/cgi-bin/gw/chameleon?sessionid=2010092315353220717&skin=fcc&lng=en&inst=consortium&conf=.%2fchameleon.conf&host=172.16.3.120%2b1111%2bDEFAULT&search=KEYWORD&function=CARDSCR&SourceScreen=INITREQ&elementcount=3&t1=Human%20Geography&u1=1035&op1=0&t2=a&u2=1001&pos=4&itempos=1&rootsearch=KEYWORD) |
| Publisher | [New York : Wiley, 2002.](http://libraryportal.fccollege.edu.pk:80/cgi-bin/gw/chameleon?sessionid=2010092315353220717&skin=fcc&lng=en&inst=consortium&conf=.%2fchameleon.conf&host=172.16.3.120%2b1111%2bDEFAULT&search=KEYWORD&function=CARDSCR&SourceScreen=INITREQ&elementcount=3&t1=Human%20Geography&u1=1035&op1=0&t2=a&u2=1001&pos=4&itempos=1&rootsearch=KEYWORD) |
| Call No | [910.02 S87P](http://libraryportal.fccollege.edu.pk:80/cgi-bin/gw/chameleon?sessionid=2010092315353220717&skin=fcc&lng=en&inst=consortium&conf=.%2fchameleon.conf&host=172.16.3.120%2b1111%2bDEFAULT&search=KEYWORD&function=CARDSCR&SourceScreen=INITREQ&elementcount=3&t1=Human%20Geography&u1=1035&op1=0&t2=a&u2=1001&pos=4&itempos=1&rootsearch=KEYWORD) |
| Edition | [2nd ed.](http://libraryportal.fccollege.edu.pk:80/cgi-bin/gw/chameleon?sessionid=2010092315353220717&skin=fcc&lng=en&inst=consortium&conf=.%2fchameleon.conf&host=172.16.3.120%2b1111%2bDEFAULT&search=KEYWORD&function=CARDSCR&SourceScreen=INITREQ&elementcount=3&t1=Human%20Geography&u1=1035&op1=0&t2=a&u2=1001&pos=4&itempos=1&rootsearch=KEYWORD) |

**Additional Reading:**

E-books, online sources and other reading handouts as proposed by the Instructor.

 **Web Links:**

http://libraryportal.fccollege.edu.pk

**Class Participation**

Students are expected to be active in class participation. i.e. group discussions, Q & A sessions. They will be assessed during classes and some bonus points have been reserved for their consistent hard work during the semester. Students are encouraged to work in a planned way for which they may seek guidance from Instructor during class session and student consultancy hours*.*

### **Assignment: 1**

Spatial Analysis

### **Assignment: 2**

### Climate Change – A Case of Pakistan

### **Tests & Quizzes**

Tectonic Plate Movement and Geo hazards

Elements of Weather and Climate

**Case Study/Directed Project/Documentary Review: Origin of the Earth**

The purpose of this activity is the application of active learning techniques to the teaching of science, with a particular emphasis on case studies and problem-based learning. Case study will be assigned to you before your mid-term examination and you have to submit and present this during the last week of this semester. Detail on this activity will be shared in class during 6th or 7th week.

**The breakup is as follows:**

**Class Participation:** 05%

**Assignments/Presentation (2):** 20%

**Quizzes (1):**  10%

**Midterm exam**: 15%

**Case study/Directed Project:** 20**%**

**Final term exam:**  30%

**TOTAL 100%**

**Attendance Policy:**

Students are expected to be regular, punctual and participating in the class / course activities for which they should remain well prepared. A student failing to participate in less than 80% of the academic exercises shall not expect Instructor’s permission to appear in the Term Examination unless for a valid reason beyond the control of the student.

**Grade Determination & Course Assessment as per FCC Policy:**

Grades are final as given by Instructor unless a reason exists for change. All the grades are given to students based on absolute marking and their performance in the class.

**Grading Legend**

Below is the grading legend of FCCU (published in all catalogues and available on the FCCU website) as approved by the Academic Council and applies for Fall 2020 as well.

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| **Grade** | **Point Value** | **Numerical Value** | **Meaning** |
| A | 4.00 | 93-100 | Superior |
| A- | 3.70 | 90-92 |
| B+ | 3.30 | 87-89 | Good |
| B | 3.00 | 83-86 |
| B- | 2.70 | 80-82 |
| C+ | 2.30 | 77-79 | Satisfactory |
| C | 2.00 | 73-76 |
| C- | 1.70 | 70-72 |
| D+ | 1.30 | 67-69 | Passing |
| D | 1.00 | 60-66 |
| F | 0.00 | 59 or below | Failing |

**Student Conduct & Other Issues:**

Students are expected to be on schedule in submitting their assignments through Moodle Account. If you foresee any difficulty with the due date, you must talk to me beforehand to allow other arrangements (if feasible). If you cannot reach me beforehand, you must have a dated doctor’s excuse or a letter from your parent(s) stating some very valid reason; otherwise, your work will be subject to penalty.

Students are expected to be academically honest and cite reference(s) of the source material in their write-ups. They should avoid copying from others in doing the assignments / exercises and cheating during examination, test or quiz. These are the least plausible acts and those indulging in such exercises will automatically get a grade F without any recourse to pardon. The matter may also be reported to the University for Further Action.

**Changes to the Syllabus:**

This syllabus was designed to convey course information and requirements as accurately as possible. It is important to note however that it may be subject to change during the course depending on the needs of the class and other situational factors. Such changes would be for your benefit and you will be notified of them as soon as possible through notifications

**Student Support Services**

[Student Counseling Services](https://www.fccollege.edu.pk/ccc/campus-counseling-center/)

[Writing Center](https://www.fccollege.edu.pk/faculty-of-humanities/writing-center/)

[Mercy Health Center](https://www.fccollege.edu.pk/mercy-health-center/)

**Other Useful Policy Documents:**

[Sexual Harassment Policy](https://www.fccollege.edu.pk/wp-content/uploads/2018/05/Doc1.pdf)

[Anti-Corruption Policy](https://www.fccollege.edu.pk/wp-content/uploads/2018/05/Anti-corruption.pdf)

[Academic integrity](https://www.fccollege.edu.pk/policy-on-academic-integrity/)

[Plagiarism Policy](https://www.fccollege.edu.pk/wp-content/uploads/2018/05/FCCU-Plagiarism-Policy.pdf)

 [Academic Calendar](https://www.fccollege.edu.pk/academic-calendar/)

I expect that you will strictly follow the core values of FCCU and put your entire efforts to learn as per the course requirements, attend classes, read the textbook(s)/other assigned reading material and do the assignments in the stipulated time period