Special Topics in Geophysics

GPH 575

Course Overview:

The course is designed to explore emerging and specialized areas within the field of geophysics. It explores up-to-date research, techniques, and advancements in geophysical exploration, providing students with a deep understanding of cutting-edge topics and their practical applications.

Course Objectives:

- ❑ Explore Emerging Geophysical Techniques.
- ❑ Investigate Specialized Geophysical Applications.
- ❑ Address Environmental and Societal Challenges.
- ❑ Engage in Research and Case Studies.
- ❑ Develop Reading and Writing Skills.
- ❑ Enhance Communication and Presentation Skills.

Course Structure:

- ❑ Lectures.
- ❑ Sessions.
- ❑ Workshops.
- ❑ Discussions.
- ❑ Research Projects.

Assessment:

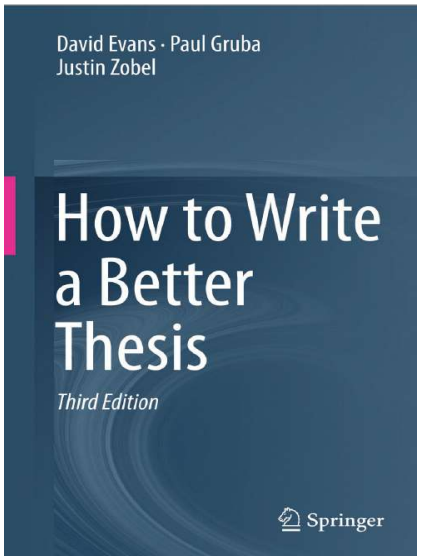
- ❑ Assignments.
- ❑ Reports.
- ❑ Research Papers.
- ❑ Presentations.
- ❑ Examinations.

Prerequisites:

- ❑ Prior Knowledge of Geophysical Principles.
- ❑ Data Analysis.
- ❑ Mathematical Methods.
- ❑ Programming Languages and Software.
- ❑ Geophysical Data Processing.

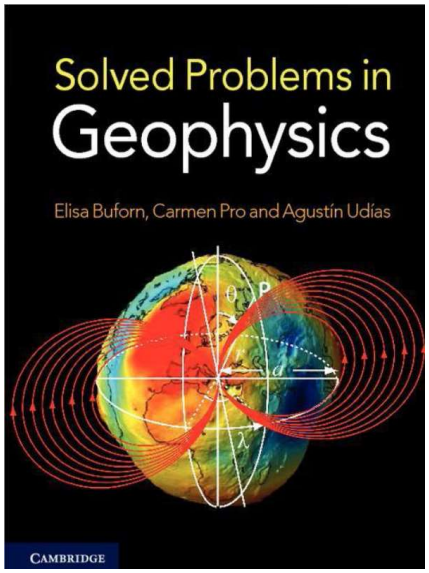
Credits:

2 hours (2+0+0)



Text Books:

- **How to Write a Better Thesis** by David Evan, Paul Gruba and Justin Zobel (2014).
- **Solved Problems in Geophysics** by Elisa Buforn, Carmen Pro and Agustin Udias (2012).



Grading:

❑ Assignments	20
❑ Reports	20
❑ Research Proposal	20
❑ Presentations	20
❑ Examinations	20

I Expect From You:

- ❑ Attendance.
- ❑ Participation.
- ❑ Deliver What is Needed On Time.
- ❑ Practice Active Learning.
- ❑ Read More and More.
- ❑ Seek Help When Needed.

Tips and Advices:

- ❑ Always Do Your Best.
- ❑ Develop Reading, Writing and Presentation Skills.
- ❑ Choose a Right Research Idea/Topic.
- ❑ Publish, Publish and Publish.
- ❑ Have a Good Study/Life Balance.