

RPKPS

1. Nama Mata Kuliah : Mineralogy and Petrography (Practicum)
2. Kode/SKS/Sifat : GEL 0102/1/C
3. Prasyarat : Telah/Sedang Mengambil Mineraologi Petrografi (GEL 1102)
4. : Praktikum Mineralogy- Petrography berisi tentang mengenalkan cara-cara praktis dalam identifikasi mineral dan batuan. Cakupan materi praktikum ini meliputi kristalografi geometri, sifat fisik dan kimia mineral, identifikasi mineral utama pembentuk batuan, dan identifikasi makroskopis batuan, serta sifat optis mineral.
5. Tujuan Pembelajaran : Mahasiswa diharapkan mampu mengidentifikasi mineral dan batuan utama yang banyak dijumpai di lapangan serta proses-proses yang menyertainya.
6. Capaian Pembelajaran (Course Learning Outcome) :

| | |
|--------|---|
| CPMK | C1. Design and conduct research in mineralogy-petrography sciences using geographical approaches and geospatial technologies |
| CPMK 1 | C1.1. Demonstrate proficiency to develop research proposal that makes use of spatial, ecological, and regional complex approaches and geospatial technologies |
| CPMK 2 | C1.2. Demonstrate ability to implement research in laboratories and field in a safe manner |
| CPMK 3 | C1.3. Demonstrate ability to write academic research report in the area of mineralogy and petrography |
| CPMK | C2. acquire and interpret mineralogy -petrography resources data |
| CPMK 4 | C2.1. Demonstrate proficiency to gather, analyze, and interpret appropriate mineralogy and petrography data |
| CPMK 5 | C2.2. Demonstrate ability to apply geospatial technologies in problem-solving |
| CPMK 6 | C2.3. Design, implement and present the results of a research that makes use of geospatial technologies and geographical approaches |

7. Pustaka Acuan

| Nomer | Daftar Pustaka |
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| 1 | Alan Wooley ed., 1978, <i>The Illustrated encyclopedia of the Mineral Kingdom</i> . The Hamlyn Group Ltd, New York |
| 2 | Boggs, S. 2009. <i>Petrology of sedimentary rocks</i> . Cambridge University Press. |
| 3 | Dackombe and Gardiner, 1983. <i>Geomorphological Field Manual</i> . George Allen & Unwin. Sydney. |
| 4 | Dana, 1987. <i>Mineral and How to Study Them</i> , John Wiley & Sons, Inc New York. |
| 5 | Endarto, Danang. 2012. <i>Batuan dan Mineral</i> . UNS Press. |

| Daftar Pustaka | |
|----------------|---|
| 6 | Lahee FH. 1961. <i>Field Geology</i> . McGraw-Hill, New York. 6 th |
| 7 | William D. Nesse, 2009. <i>Introduction to Mineralogy</i> . Oxford University Press |

8. Rincian Topik

| Minggu Ke | Topik Bahasan | Metode Pembelajaran | Media Ajar | Pustaka |
|-----------|------------------------------------|---|---------------------------------|---------|
| 1 | Cristalography | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,5,7 |
| 2 | Physical Mineralogy | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,5,7 |
| 3 | Chemical Mineralogy (dry) | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,5,7 |
| 4 | Chemical Mineralogy (wet) | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,5,7 |
| 5 | Petrography – Igeneous Rock | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,4,5,7 |
| 7 | Petrography – Sedimentary Rock | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,2,5,7 |
| 7 | Petrography – Metamorphic Rock | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,4,5,7 |
| 8 | Optical Mineralogy and Petrography | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,4,5,7 |
| 9 | Introducing XRD and XRF analysis | Tatap muka, diskusi di kelas, STAR, SCL, Praktek di kelas | Slide pppt, laptop, proyektor | 1,5,7 |
| 10 | Field Workd | Lapangan | Peta, Alat lapangan, microphone | 3,6 |

9. Mapping CPMK

| Pertemuan | CPMK 1 | CPMK 2 | CPMK 3 | CPMK 4 | CPMK 5 | CPMK 6 |
|-----------|--------|--------|--------|--------|--------|--------|
| 1 | X | X | X | X | | |
| 2 | X | X | X | X | | |
| 3 | X | X | X | X | | |
| 4 | X | X | X | X | | |
| 5 | | X | X | X | X | X |
| 6 | | X | X | X | X | X |
| 7 | | X | X | X | X | X |
| 8 | | X | X | X | X | X |
| 9 | | X | X | X | X | X |
| 10 | X | | X | X | X | X |

10. Assessment Map

| Assessment | CPMK 1 | CPMK 2 | CPMK 3 | CPMK 4 | CPMK 5 | CPMK 6 |
|--------------------|--------|--------|--------|--------|--------|--------|
| Quiz/Pretest | X | X | X | | | |
| Practicum Activity | X | X | X | | | |
| Report | | | | X | X | X |
| Summative Test | | | | X | X | X |

11. Assessment Method

| Pertemuan | Quiz/Pretest | Practicum Activity | Report | Summative Test |
|-----------|--------------|--------------------|--------|----------------|
| 1 | X | X | X | |
| 2 | | X | X | |
| 3 | X | X | X | |
| 4 | | X | X | |
| 5 | X | X | X | |
| 6 | | X | X | |
| 7 | X | X | X | |
| 8 | | X | X | |
| 9 | X | X | X | |
| 10 | | X | X | X |