



Universitas Negeri Surabaya
Faculty of Mathematics and Natural Sciences
Undergraduate Chemistry Study Program

Document Code

SEMESTER LEARNING PLAN

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|--|--|----------------------|-----------------------------------|--|----------------------------------|--|------------------------------|---|---|----|----|----|----|----|----|----|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| Courses | CODE | Course Family | Credit Weight | SEMESTER | Compilation Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capita Selecta | 4720102035 | | T=2 P=0 ECTS=3.18 | 7 | July 18, 2024 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AUTHORIZATION | SP Developer | | Course Cluster Coordinator | | Study Program Coordinator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | Dr. Amaria, M.Si. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Learning model | Project Based Learning | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Program Learning Outcomes (PLO) | PLO study program that is charged to the course | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Program Objectives (PO) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-PO Matrix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | P.O | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Short Course Description | Study of the latest developments in the fields of Analytical Chemistry, Physical Chemistry, Organic Chemistry, Inorganic Chemistry and Biochemistry | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 10%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> </table> | | | | | P.O | Week | | | | | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| P.O | Week | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | | | | | | | | | | | | | | | | | | | |
| References | Main : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. <ol style="list-style-type: none"> 1. Abdullah, M. (2009). <i>Pengantar Nanosains</i> . Bandung: ITB 2. Dewick, P. M. (2002). <i>Medicinal Natural Products</i> . 2nd Edition. New York: John Wiley and Sons, Inc. 3. Karlin, K.D. (2003). <i>Progress in Inorganic Chemistry</i> . Vol 51. New Jersey: John Wiley and Sons, Inc. 4. Jurnal terkini bidang Kimia Analitik, Kimia Organik, Kimia Anorganik, Kimia Fisika, dan Biokimia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Supporters: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting lecturer | Prof. Dr. Pirim Setiarso, M.Si. Prof. Dr. Suyatno, M.Si. Dr. I Gusti Made Sanjaya, M.Si. Prof. Dr. Nuniek Herdyastuti, M.Si. Prof. Dr. Sari Edi Cahyaningrum, M.Si. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Week- | Final abilities of each learning stage (Sub-PO) | Evaluation | | Help Learning, Learning methods, Student Assignments, [Estimated time] | | Learning materials [REFERENCES] | Assessment Weight (%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Indicator | Criteria & Form | Offline (offline) | Online (online) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 1 | 1. Students understand the Kapita Selekt lecture system2. Understand the latest basic chemical concepts in the field of Analytical Chemistry | 1. Explain the RPS, lecture system, assessment system, determination of graduation, and Kapita Selekt lecture rules 2. Explain the latest chemical concepts in the field of Analytical Chemistry 3. Explain the application of the latest chemical concepts in the field of Analytical Chemistry 4. Explain the impact of applying chemical concepts latest in the field of Analytical Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 2 | Understand the latest basic chemical concepts in the field of Analytical Chemistry | 1. Explain the latest chemical concepts in the field of Analytical Chemistry 2. Explain the application of the latest chemical concepts in the field of Analytical Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Analytical Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 3 | Understand the latest basic chemical concepts in the field of Analytical Chemistry | 1. Explain the latest chemical concepts in the field of Analytical Chemistry 2. Explain the application of the latest chemical concepts in the field of Analytical Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Analytical Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |

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| 4 | Understand the latest basic chemical concepts in the field of Physical Chemistry | 1. Explain the latest chemical concepts in the field of Physical Chemistry 2. Explain the application of the latest chemical concepts in the field of Physical Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Physical Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 5 | Understand the latest basic chemical concepts in the field of Physical Chemistry | 1. Explain the latest chemical concepts in the field of Physical Chemistry 2. Explain the application of the latest chemical concepts in the field of Physical Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Physical Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 6 | Understand the latest basic chemical concepts in the field of Physical Chemistry | 1. Explain the latest chemical concepts in the field of Physical Chemistry 2. Explain the application of the latest chemical concepts in the field of Physical Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Physical Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 7 | Understand the latest basic chemical concepts in the field of Organic Chemistry | 1. Explain the latest chemical concepts in the field of Organic Chemistry 2. Explain the application of the latest chemical concepts in the field of Organic Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Organic Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |

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| 8 | Understand the latest concepts in the fields of analytical chemistry, physical chemistry, and synthetic organic chemistry | - | Criteria: Attached | Midterm Exam 2 X 50 | | | 0% |
| 9 | Understand the latest basic chemical concepts in the field of Organic Chemistry | 1. Explain the latest chemical concepts in the field of Organic Chemistry 2. Explain the application of the latest chemical concepts in the field of Organic Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Organic Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 10 | Understand the latest basic chemical concepts in the field of Inorganic Chemistry | 1. Explain the latest chemical concepts in the field of Inorganic Chemistry 2. Explain the application of the latest chemical concepts in the field of Inorganic Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Inorganic Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 11 | Understand the latest basic chemical concepts in the field of Inorganic Chemistry | 1. Explain the latest chemical concepts in the field of Inorganic Chemistry 2. Explain the application of the latest chemical concepts in the field of Inorganic Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Inorganic Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |

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| 12 | Understand the latest basic chemical concepts in the field of Inorganic Chemistry | 1. Explain the latest chemical concepts in the field of Inorganic Chemistry 2. Explain the application of the latest chemical concepts in the field of Inorganic Chemistry 3. Explain the impact of applying the latest chemical concepts in the field of Inorganic Chemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 13 | Understand the latest basic chemical concepts in the field of Biochemistry | 1. Explain the latest chemical concepts in the field of Biochemistry 2. Explain the application of the latest chemical concepts in the field of Biochemistry 3. Explain the impact of applying the latest chemical concepts in the field of Biochemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 14 | Understand the latest basic chemical concepts in the field of Biochemistry | 1. Explain the latest chemical concepts in the field of Biochemistry 2. Explain the application of the latest chemical concepts in the field of Biochemistry 3. Explain the impact of applying the latest chemical concepts in the field of Biochemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 15 | Understand the latest basic chemical concepts in the field of Biochemistry | 1. Explain the latest chemical concepts in the field of Biochemistry 2. Explain the application of the latest chemical concepts in the field of Biochemistry 3. Explain the impact of applying the latest chemical concepts in the field of Biochemistry | Criteria: Attached | Presentations, discussions and assignments 2 X 50 | | | 0% |
| 16 | Understand the latest basic chemical concepts in the fields of Organic Chemistry, Inorganic Chemistry and Biochemistry | - | Criteria: Attached | Final Semester Examination (UAS) 2 X 50 | | | 0% |

Evaluation Percentage Recap: Project Based Learning

| No | Evaluation | Percentage |
|----|------------|------------|
| | | 0% |

Notes

1. **Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
2. **The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
5. **Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
7. **Forms of assessment:** test and non-test.
8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.