



**Universitas Negeri Surabaya
Faculty of Postgraduate School,
Master of Technology and Vocational Education Study
Program**

Document Code

SEMESTER LEARNING PLAN

| Courses | CODE | Course Family | Credit Weight | | | SEMESTER | Compilation Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|----------------------------|---|-----------|----------------------------------|--------------------|------|-------|-------|----|----|----|----|------|----|--|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Philosophy of Science and Foundations of PTK | 8310102056 | Compulsory Study Program Subjects | T=1 | P=1 | ECTS=4.48 | 2 | January 9, 2024 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AUTHORIZATION | SP Developer | | Course Cluster Coordinator | | | Study Program Coordinator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Prof. Dr. Tri Wrahatnolo, M.Pd | | Dra. Ratna Suhartini, M.Si | | | Dr. Ir. Achmad Imam Agung, M.Pd. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Learning model | Case Studies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Program Learning Outcomes (PLO) | PLO study program which is charged to the course | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-2 | Demonstrate the character of being tough, collaborative, adaptive, innovative, inclusive, lifelong learning and entrepreneurial spirit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-6 | Work together and have social sensitivity and concern for society and the environment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Program Objectives (PO) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PO - 1 | Students are able to understand the basic philosophy of TVET, TVET in Developed and Developing Countries, Improving TVET in Indonesia, Managing TVET, TVET as a Practical Development Concept, Digitalism for TVET and the need for a TVET System in the Future | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-PO Matrix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 15%;">P.O</td> <td style="width: 15%;">PLO-2</td> <td style="width: 15%;">PLO-6</td> <td colspan="4"></td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> <td colspan="4"></td> </tr> </table> | | | | | | P.O | PLO-2 | PLO-6 | | | | | PO-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | P.O | PLO-2 | PLO-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PO-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PO Matrix at the end of each learning stage (Sub-PO) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="margin-left: auto; margin-right: auto;"> <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> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> | | | | | | P.O | Week | | | | | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | PO-1 | | | | | | | | | | | | | | | | |
| P.O | Week | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Short Course Description | Study of the philosophical foundations of TVET, TVET in Developed and Developing Countries, Improving TVET in Indonesia, Managing TVET, TVET as a Practical Development Concept, Digitalism for TVET and the need for a TVET System in the Future Learning is carried out using a student-centred approach, namely inquiry-based learning and project-based learning with case solving methods or project-based group learning. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| References | Main : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. [1]David Guile and Lorna Unwin (2019).The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. [2]David John Rumsey. (n.y).Philosophy, Rationale and Systems of Technical and Vocational Eduation and Training. Sydney: Department of Technical and Futher Education. [3]Terry Hyland (2014). Reconstructing Vocational Education and Training for the 21st Century: Mindfulness, Craft, and Values. SAGE Open January-March 2014: 1–15 DOI: 10.1177/2158244013520610. Cedefop (2017). The changing nature and role of vocational education and training in Europe. Volume 1: conceptions of vocational education and training: an analytical framework. Luxembourg: Publications Office. Cedefop research paper; No63. http://dx.doi.org/10.2801/532605 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting lecturer | Supporters: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. [7]Bin Bai & Paryono (2019).Vocational Education and Training in ASEAN Member States - Current Status and Future Development Perspectives on Rethinking and Reforming Education.Singapore: Springer Nature Singapore Pte Ltd. ISBN 978-981-13-6616-1 ISBN 978-981-13-6617-8 (eBook) https://doi.org/10.1007/978-981-13-6617-8 [8] Rupert Maclean (2018).Vocational Teacher Education in Central Asia Developing Skills and Facilitating Success.Technical and Vocational Education and Training: Issues, Concerns and ProspectsVolume 28ISSN 1871-3041 ISSN 2213-221X (electronic) Technical and Vocational Education and Training: Issues, Concerns and Prospects ISBN 978-3-319-73092-9 ISBN 978-3-319-73093-6 (eBook) https://doi.org/10.1007/978-3-319-73093-6 Christine Ante (2016) The Europeanisation of Vocational Education and Training. ISSN 2198-7289 ISSN 2198-7297 (electronic) Contributions to Political Science ISBN 978-3-319-41569-7 ISBN 978-3-319-41570-3 (eBook) DOI 10.1007/978-3-319-41570-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting lecturer | Prof. Dr. H. Muchlas, M.Pd. Dr. Edy Sulistiyo, M.Pd. Dr. Ratna Suhartini, M.Si. Dr. Ir. Achmad Imam Agung, M.Pd. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Week- | Final abilities of each learning | Evaluation | | Help Learning, Learning methods, Student Assignments, [Estimated time] | | | Learning materials | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | stage (Sub-PO) | Indicator | Criteria & Form | Offline (<i>offline</i>) | Online (<i>online</i>) | [References] | Assessment Weight (%) |
|-----|---|--|--|-------------------------------|--------------------------|--|--------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Carry out analysis and synthesis of the TVET concept from the perspective of the philosophy of science | | Form of Assessment : Participatory Activities | case studies | | Material: David Guile and Lorna Unwin (2019). The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. References: Material: David Guile and Lorna Unwin (2019). The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. References: | 5% |
| 2 | Carry out analysis and synthesis of the TVET concept from the perspective of the philosophy of science | students are able to analyze the concept of TVET | Criteria: 0-100 Form of Assessment : Participatory Activities | | case studies | Material: David Guile and Lorna Unwin (2019). The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. References: Material: David Guile and Lorna Unwin (2019). The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. References: | 5% |
| 3 | Carry out analysis and synthesis of the TVET concept from the perspective of the philosophy of science | students are able to analyze the concept of TVET | Criteria: 0-100 Form of Assessment : Participatory Activities | | case studies | Material: David Guile and Lorna Unwin (2019). The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. References: Material: David Guile and Lorna Unwin (2019). The Wiley Handbook of Vocational Education and Training. NJ: John Wiley & Sons, Inc. References: | 5% |
| 4 | Carry out analysis and synthesis of the TVET Development Concept according to the needs of key competencies and 21st Century Skills | | | | case studies 2x50 | | 5% |
| 5 | Carry out analysis and synthesis of the TVET Development Concept according to the needs of key competencies and 21st Century Skills | | Form of Assessment : Participatory Activities | | case studies 2x50 | | 5% |
| 6 | Carry out analysis and synthesis of the TVET Development Concept according to the needs of key competencies and 21st Century Skills | | Form of Assessment : Participatory Activities | | case studies 2x50 | | 10% |
| 7 | Carry out analysis and synthesis of the TVET Development Concept according to the needs of key competencies and 21st Century Skills | analyze TVET issues | Form of Assessment : Participatory Activities | | case studies 2x50 | | 5% |
| 8 | | analyze TVET issues | Form of Assessment : Participatory Activities | | case studies | | 10% |
| 9 | | analyze TVET issues | Form of Assessment : Participatory Activities | | case studies | | 10% |
| 10 | Carry out analysis and synthesis of the TVET System from the perspective of Philosophy of Science | analyze the TVET system | Form of Assessment : Participatory Activities | | case studies | Material: Eveline Wuttke & Jürgen Seifried (2020). Vocational Education and Training in the Age of Digitization-Challenges and Opportunities. Research in Vocational Education. http://creativecommons.org/licenses/by/4.0/ or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA. References: | 10% |

| | | | | | | | |
|----|--|---|---|--|----------------------|---|-----|
| 11 | Carry out analysis and synthesis of the TVET System from the perspective of Philosophy of Science | analyze the TVET system | Form of Assessment : Participatory Activities | | case studies | Material: Eveline Wuttke & Jürgen Seifried (2020). Vocational Education and Training in the Age of Digitization-Challenges and Opportunities. Research in Vocational Education. http://creativecommons.org/licenses/by/4.0/ or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA. References: | 5% |
| 12 | Carry out analysis and synthesis of the TVET System from the perspective of Philosophy of Science | analyze the TVET system | Form of Assessment : Participatory Activities | | case studies | Material: Eveline Wuttke & Jürgen Seifried (2020). Vocational Education and Training in the Age of Digitization-Challenges and Opportunities. Research in Vocational Education. http://creativecommons.org/licenses/by/4.0/ or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA. References: | 5% |
| 13 | | analyze the contribution of science and technology in the development of vocational education | Form of Assessment : Participatory Activities | | case study 2x15 | Material: Matthias Pilz (2019). The Future of Vocational Education and Training in a Changing World. Springer Fachmedien Wiesbaden GmbH 2012. ISBN 978-3-531-18527-9. ISBN 978-3-531-18757-0 (ebook). DOI 10.1007/978-3-531-18757-0 References: | 10% |
| 14 | | analyze the contribution of science and technology in the development of vocational education | Form of Assessment : Participatory Activities | | case study 2x15 | Material: Matthias Pilz (2019). The Future of Vocational Education and Training in a Changing World. Springer Fachmedien Wiesbaden GmbH 2012. ISBN 978-3-531-18527-9. ISBN 978-3-531-18757-0 (ebook). DOI 10.1007/978-3-531-18757-0 References: | 5% |
| 15 | Designing a Study on the application of the Philosophy of Science in vocational education | analyzing the application of philosophy to vocational education | Criteria: 0-100 Form of Assessment : Participatory Activities | | case studies 2x50 | | 5% |
| 16 | Carrying out analysis and synthesis regarding Policy and Development of the Vocational Education System in Indonesia | analyzing vocational education development policies | Criteria: 0-100 Form of Assessment : Project Results Assessment / Product Assessment | | case studies 2x50 | Material: Christine Ante (2016) The Europeanization of Vocational Education and Training. ISSN 2198-7289 ISSN 2198-7297 (electronic) Contributions to Political Science ISBN 978-3-319-41569-7 ISBN 978-3-319-41570-3 (eBook) DOI 10.1007/978-3-319-41570-3 References: | 5% |

Evaluation Percentage Recap: Case Study

| No | Evaluation | Percentage |
|----|---|------------|
| 1. | Participatory Activities | 95% |
| 2. | Project Results Assessment / Product Assessment | 5% |
| | | 100% |

Notes

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Forms of assessment:** test and non-test.
- 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.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.

