| Universitas Airlangga | SEMESTER LEARNING PLAN | | Prepared by | Examined by | Approved by | Document Registration Number |
|---|---|---|---|---|---|---|
| | SLP | | (Person in Charge) | (Head of Bachelor Program / Head of Department) | Vice Dean I | 01/S1Kesmas/RPS/2019 |
| | Revision - Date | January 1st, 2019 | Dr. Noeroel Widajati, S.KM.,M.Sc | Dr. Diah Indriani, S.Si., M.Si | Dr. Santi Martini, dr., M.Kes | |
| Faculty of Public Health | Valid on Semester (odd/even) / Academic Year | Odd Semester 2019/2020 | (sign) | (sign) | (sign) | |

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## A. DETAILS OF COURSE

| | |
|---|---|
| **1. Course Name** | Implementation of Occupational Health and Safety |
| **2. Course Code** | KMK313 |
| **3. Credits (SKS)** | 2 (two) SKS |
| **4. Semester / Term** | VII (seventh) |
| **5. Study Program** | Bachelor of Public Health |
| **6. Student Learning Achievement** | 1. Able to carry out a study and analysis of the situation<br>2. Able to carry out community empowerment, especially working communities<br>3. Having mastery of public health sciences, especially community workers |
| **7. Course Learning Achievement** | 1. Define the problem correctly<br>2. Combining various strategies separately interacting with people from various backgrounds<br>3. Develop an all-time commitment to learning and develop strong critical thinking |
| **8. Course Description** | This course discusses 1) working climate, 2) lighting, 3) noise, 4) dust measurement, 5) pulmonary physiology, 6) audiometry, 7) blood pressure, 8) blood chemistry, 9) physical fitness, 10) burden work, and 11) Work fatigue. |
| **9. Course Prerequisites (if any)** | None |
| **10. Instructor** | Dr. Noeroel Widajati, S.KM.,M.Sc |
| **11. Teaching Assistants** | 1. Mulyono, S.KM.,M.Kes<br>2. Dr. Y. Denny Ardyanto W, Ir.,M.S<br>3. Dr. Indriati Paskarini, SH.,M.Kes<br>4. Putri Ayuni Alayyannur. S.KM.,M.KKK<br>5. Shintia Yunita Arini, S.KM.,M.KKK |

## B. TEACHING PROGRAM

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| Faculty of Public Health | Valid on Semester (odd/even) / Academic Year | Odd Semester 2019/2020 | (sign) | (sign) | (sign) | |

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| Week | Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P) | Study Materials | Teaching Methods | Additional Materials for Learning | Meeting Time | Course Objectives | Criteria and Indicator of Evaluation / Measurable Learning Outcome (*hard* and *soft skills*) | Mark / Grade / Percentage (%) | Reference Number Ref. (number) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Students are able to understand the scope of Occupational Health and Safety practicum | General description of occupational health and safety practicum:<br>1. Lecture contract<br>2. Introduction to occupational safety and health practicum<br>3. Equipment and work methods during the occupational safety and health practicum. | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |
| 2 | Students are able to explain and take measurements of lighting | General description of lighting measurements.<br>1. Basic lighting principles | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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| Week | Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P) | Study Materials | Teaching Methods | Additional Materials for Learning | Meeting Time | Course Objectives | Criteria and Indicator of Evaluation / Measurable Learning Outcome (*hard* and *soft skills*) | Mark / Grade / Percentage (%) | Reference Number Ref. (number) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | 2. Procedure for measuring light<br>3. The legal basis of lighting<br>4. Follow up on the results of lighting measurements | | | | | | | |
| 3 | Students are able to explain and take measurements of dust checks | General description of dust measurements.<br>1. Basic principles of dust<br>2. Procedure for measuring dust<br>3. Legal basis of dust measurement<br>4. Follow up on the results of the dust measurement | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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| Faculty of Public Health | Valid on Semester (odd/even) / Academic Year | Odd Semester 2019/2020 | (sign) | (sign) | (sign) | |

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| Week | Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P) | Study Materials | Teaching Methods | Additional Materials for Learning | Meeting Time | Course Objectives | Criteria and Indicator of Evaluation / Measurable Learning Outcome (*hard* and *soft skills*) | Mark / Grade / Percentage (%) | Reference Number Ref. (number) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Students are able to explain and take measurements of dust checks | General description of dust measurements.<br>1. Basic principles of dust<br>2. Procedure for measuring dust<br>3. Legal basis of dust measurement<br>4. Follow up on the results of the dust measurement | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |
| 4 | Students are able to explain and measure workload | General description of workload measurement.<br>1. Basic principles of workload<br>2. Procedures for measuring workload | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | 3. Legal basis of workload<br>4. Follow up on the results of workload measurement | | | | | | | |
| 5 | Students are able to explain and take audiometric measurements | General description of audiometric measurements.<br>1. Basic audiometry principles<br>2. Procedure for measuring audiometry<br>3. The legal basis of audiometry<br>4. Follow up on audiometry measurement results | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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| Week | Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P) | Study Materials | Teaching Methods | Additional Materials for Learning | Meeting Time | Course Objectives | Criteria and Indicator of Evaluation / Measurable Learning Outcome (*hard* and *soft skills*) | Mark / Grade / Percentage (%) | Reference Number Ref. (number) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 6 | Students are able to explain and take measurements of lung physiology | General description of pulmonary physiology measurements.<br>1. Basic principles of pulmonary physiology<br>2. Procedures for measuring lung function<br>3. The legal basis of pulmonary physiology<br>4. Follow up on the results of pulmonary physiology measurements | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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| Week | Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P) | Study Materials | Teaching Methods | Additional Materials for Learning | Meeting Time | Course Objectives | Criteria and Indicator of Evaluation / Measurable Learning Outcome (*hard* and *soft skills*) | Mark / Grade / Percentage (%) | Reference Number Ref. (number) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 7 | Students are able to explain and measure blood chemistry | General description of blood chemistry measurements.<br>1. Basic principles of blood chemistry<br>2. The procedure for measuring blood chemistry<br>3. The legal basis of blood chemistry<br>4. Follow up on the results of blood chemistry measurements | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |
| 8 | Students are able to explain and measure physical fitness index (IKJ) | General description of IKJ measurement.<br>1. Basic principles of IKJ | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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| Week | Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P) | Study Materials | Teaching Methods | Additional Materials for Learning | Meeting Time | Course Objectives | Criteria and Indicator of Evaluation / Measurable Learning Outcome (*hard* and *soft skills*) | Mark / Grade / Percentage (%) | Reference Number Ref. (number) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | 2. Procedure for measuring IKJ<br>3. The legal basis of the IKJ<br>4. Follow up on the results of the IKJ measurement | | | | | | | |
| 9 | Students are able to explain and measure physical fitness index (IKJ) | General description of IKJ measurement.<br>1. Basic principles of IKJ<br>2. Procedure for measuring IKJ<br>3. The legal basis of the IKJ<br>4. Follow up on the results of the IKJ measurement | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10 | Students are able to explain and measure work fatigue | General description of work fatigue measurement.<br>1. The basic principle of work fatigue<br>2. Procedures for measuring work fatigue<br>3. The legal basis of work fatigue<br>4. Follow up on the results of work fatigue measurement | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |
| 11 | Students are able to explain and take blood pressure measurements | General description of blood pressure measurement.<br>1. Basic principles of blood pressure | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | 2. The procedure for measuring blood pressure<br>3. The legal basis of blood pressure<br>4. Follow up on the results of blood pressure measurement | | | | | | | |
| 12 | Students are able to explain and make noise measurements | General description of noise measurements.<br>1. The basic principle of noise<br>2. Procedure for measuring noise<br>3. The legal basis for noise | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | 4. Follow up on the results of noise measurements | | | | | | | |
| 13 | Students are able to explain and measure work climate | General description of work climate measurements.<br>1. Basic principles of work climate<br>2. Procedure for measuring work climate<br>3. The legal basis for the work climate<br>4. Follow up on the work climate measurement results | Lectures<br>Discussions<br>Simulation | LCD<br>Teaching material handout | 2x50 minutes | 1. Introduction<br>2. Pay attention and discussion<br>3. Take notes and provide responses | Complex and creative thinking, practice, cooperation, communication | 7,14% | 1-5 |

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## C. REQUIRED TEXTS / REFERENCES / ESSENTIAL READINGS


1. Encyclopedia Occupational Health and Safety, ILO/2009
2. Higiene Perusahaan Kesehatan dan Keselamatan Kerja, Suma'mur, 2013
3. Ergonomi, IB Manuaba, 2005
4. Ergonomi Industri : Dasar-Dasar Ergonomi dan Implementasi di tempat kerja, 2014
5. Treshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices, ACGIH 2019