|  |  |  |
| --- | --- | --- |
| **Biological Agents** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/301/> |
| *No required textbook. Suggested/option reading list:*  • Macher, J.M., Gold, D., Cruz, P., Kyle, J.L., Durrani, T.S., Shusterman, D. Chapter 6 – evaluation and management of exposure to infectious agents. In: Handbook of Occupational Safety and Health, 3rd ed, Mansdorf, S.Z. (ed). John Wiley & Sons, 2019. pp: 147-197.  • Douwes, J., Thorne, P.S., Pearce, N. Biological agents – recognition. In: Modern Industrial Hygiene, Volume 2, Perkins, J.L. (ed). ACGIH, Cincinnati, 2003, pp: 219-292.  • Heederik, D., Thorne, P.S., Douwes, J. Biological agents – monitoring and evaluation of aerosol exposure. In: Modern Industrial Hygiene, Volume 2, Perkins, J.L. (ed). ACGIH, Cincinnati, 2003, pp: 293-328.  • Martinez, K.F., Thorne, P.S. Biological agents – control in the occupational environment. In: Modern Industrial Hygiene, Volume 2, Perkins, J.L. (ed). ACGIH, Cincinnati, 2003, pp: 329- 382. Other key readings available online are:  • Jones, A. Biological hazards. In: The OHS Body of Knowledge for Generalist OHS Professionals, 2 nd ed, HaSPA (Health and Safety Professionals Alliance), Tullamarine, VIC, Safety Institute of Australia, 2021. <https://www.ohsbok.org.au/chapter-18-biological-hazards/>  • Pathogen Safety Data Sheets, Government of Canada. https://www.canada.ca/en/publichealth/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-riskassessment.html  • Meima, M., Kuijpers, E., van den Berg, C., Kruizinga, A., van Kesteren, N., Spaan, S. Biological agents and prevention of work-related disease: a review. European Agency for Safety and Health at Work, 2020. https://osha.europa.eu/en/publications/review-specific-work-relateddiseases-due-biological-agents/view • Jedynska, A., ., Kuijpers, E., van den Berg, C., Kruizinga, A., Meima, M., Spaan, S. Biological agents and prevention of work-related disease: results of a literature review, expert survey and analysis of monitoring systems. European Agency for Safety and Health at Work, 2019. <https://osha.europa.eu/en/publications/biological-agents-and-work-related-diseasesresults-literature-review-expert-survey-and/view>  • CDC Diseases and Conditions website: https://www.cdc.gov/diseasesconditions/ |

|  |  |  |
| --- | --- | --- |
| **Biostatistics** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/environmental-health/ENH/440/> |
| *Required Textbook:*  The Analysis of Biological Data 3e with ACHIEVE (Single-Term Access) ISBN: 9781319433307  *Required Software:*  JMP data analysis software |

|  |  |  |
| --- | --- | --- |
| **Data Management** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/public-health-and-occupational-health/POH/103/> |
| *Required Textbook:*  Young, I. (2019). Mathematics for Occupational and Public Health Professionals. Toronto, ON: Ryerson University Pressbooks. Available from: https://pressbooks.library.ryerson.ca/ohsmath/ |

|  |  |  |
| --- | --- | --- |
| **Safety Control Methods** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/623/> |
| *Required Textbook:*  Chapter 1,3,4,5,6,10, and 2 (end of term) of:  -ACGIH. Industrial Ventilation, A Manual of Recommended Practice for design, 29th Edition, Cincinnati,  OH: American Conference of Governmental Industrial Hygienists, 2016 (available at bookstore).  All the version after 2016 are acceptable, but the pages will be different.  Chapter 32 of:  -DiNardi, editor. 1997. The Occupational Environment - Its Evaluation and Control. American Industrial  Hygiene Association Press, Fairfax, VA. |
|  | **Graduate - Iowa** | *Brauer’s Safety for Engineers* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| **Risk Assessment** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/environmental-health/ENH/825/> |
| No single textbook encompasses the range of material introduced during this course. A comprehensive set of notes, readings, problems and solutions has been prepared and will be on the D2L site during the first week of class. |

|  |  |  |
| --- | --- | --- |
| **Communication in the Health Sciences** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/communication/CMN/100/> |
| Textbooks Course reading materials may be provided in electronic form OR in a reading package available at the Ryerson bookstore. In addition, other readings may be assigned and provided by the instructor. |

|  |  |  |
| --- | --- | --- |
| **Physical Agents** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/314/> |
| References:  1. OSHA Manual: https://www.osha.gov/dts/osta/otm/new\_noise/chapters\_all.pdf [https://www.osha.gov/otm/section-3-health-hazards/chapter-5 2](https://www.osha.gov/otm/section-3-health-hazards/chapter-5%202).  2. Text book: Fundamentals of Industrial Hygiene, Sixth Edition, Barbara A. Plog, Patricia j. Quinlan.  a. Part 2- Anatomy, physiology, and pathology of ears.  b. Part 3- Recognition of Hazards  i. Chapter 9- Industrial Noise  ii. Chapter 12- Thermal stress  c. Appendices  i. D Conversion of Units  ii. E Review of Mathematics  3. Textbook: The Occupational Environment - Its Evaluation and Control. DiNardi. American Industrial Hygiene Association Press, Fairfax, VA  a. Page 475 to 482- Evaluation and control of Vibration  4. As well as other handouts that will be posted on the blackboard (blackboard is an advanced website designated to Ryerson University and designed for students and professors to communicate the course matters and materials).  Other references:  • Noise Manual, Berger, Elliott H. American Industrial Hygiene Association, 2003.  • Harris, C. 1991. Handbook of Acoustical Measurements and Noise Control 3th Edition. McGraw Hill.  • ACGIH. 1999. Threshold Limit Values and Biological Exposure Indices. Cincinnati, OH: ACGIH.  • Noise Control, A guide for workers and employers http://www.nonoise.org/hearing/noisecon/noisecon.htm |

|  |  |  |
| --- | --- | --- |
| **Fire and Radiation Safety** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/709/> |
| Optional Fire modeling and consequence analysis is an inevitable component of emergency response and management. In this course, the application of ALOHA software to fire modeling and analysis will be demonstrated. As such, you are advised to download the software (it is free). The Windows and Mac versions of the software can be downloaded from the link below although the software may not be compatible with some IOS systems (Mac computers): https://www.epa.gov/cameo/aloha-software Interested students may also find the following book (in addition to what provided in the D2L) helpful:  Interested students may also find the following book (in addition to what provided in the D2L) helpful:  · Fire Safety Management Handbook (2014), by Daniel E. Della-Guistina. ISBN 978-1-4822-2122-0.  · Fundamentals of Fire Protection for the Safety Professionals (2005), by Ferguson LH & Janicak CA. ISBN 0- 86587-988-5. |

|  |  |  |
| --- | --- | --- |
| **Introductory Toxicology** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/322/> |
| Textbook: Casarett & Doull's toxicology: the basic science of poisons by Klaassen, C. D.; Casarett, L. J. |

|  |  |  |
| --- | --- | --- |
| **Advanced Toxicology** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/422/> |
| Textbook: Casarett & Doull's toxicology: the basic science of poisons by Klaassen, C. D.; Casarett, L. J. |

|  |  |  |
| --- | --- | --- |
| **Occupational Hygiene I** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/421/> |
| Optional references:  Bisesi and Kohn (2004) “Industrial Hygiene Evaluation Method, 2nd Ed.”  Spellman (2017). “Industrial hygiene simplified: a guide to anticipation, recognition, evaluation, and control of workplace hazards” |

|  |  |  |
| --- | --- | --- |
| **Occupational Hygiene II** | **Undergraduate – Ryerson University** | Course description: <https://www.ryerson.ca/calendar/2021-2022/courses/occupational-health/OHS/621/> |
| Optional references:  Rose, Vernon E.; Cohrssen, Barbara. Patty's Industrial Hygiene. John Wiley & Sons, 2011 |