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| Day | Hours | Lecture Content |
| 1 | 4 | 农田氮循环和N2O排放观测（顾江新） |
| 2 | 4 | 农田N2O排放模型模拟（顾江新） |
| 3 | 2 | Introduction* Students/Instructor introductions. Overview of module is presented with learning outcomes
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| 1 | Western Canadian Agricultural Practices* Common agricultural practices used to produce annual field crops and livestock important to HOLOs are reviewed
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| 4 | 1 | Greenhouse Gas Emissions* Overview of GHG emissions important to HOLOs are reviewed: CO2, N2O, CH4
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| 1 | Sources and Sinks of Greenhouse Gas Emissions in Canadian Agriculture* Sources and sinks of GHG emissions related to annual crop production and livestock production are reviewed
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| 1 | GHG Quiz* Students will be given a short answer quiz to assess their knowledge of the material presented up to that point
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| 5 | 3 | HOLOs Whole Farm Greenhouse Gas Modeling Program* Student download HOLOs v 2.2 and are introduced to what the program does and how one sets up a modeling scenario. Students complete a HOLOs mini-assignment.
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| 6 | 2 | HOLOs Assignment* Students introduced to HOLOs major assignment; students formed into groups for assignment work.
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| 2 | HOLOs Assignment Work Period* Instructor supervised HOLOs assignment work period for assigned groups.
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| 7 | 3 | HOLOs Assignment Work Period* Instructor supervised HOLOs assignment work period for assigned groups
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| 8 | 2 | HOLOs Assignment Presentations* Student groups present the results of their HOLOs modeling assignment
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| 2 | Student Evaluation and Student Comments* Student evaluation (if required) and/or review of course material and opportunity for students to comment on learning experience.
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| 9 | 4 | 农业系统碳足迹评估（王效琴） |
| Total Days: 9 | Total Hours: 32 | Activities can be delivered in 2 – 3 hour periods requiring six days although days do not have to be consecutive. Alterations can be made to schedule to fit student schedule. Assignment work time is expected to include significant direct contact between students and instructor. |