

# COURSELINK TOOL SPOTLIGHT: INTELLIGENT AGENTS

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# AGENDA

- What is the Intelligent Agents tool?
- Potential course-level uses for Intelligent Agents
- Accessing Intelligent Agents (& adjusting settings)
- Creating & testing your agents (with demos!)
- Tips on how to get the most from your agents
- Finding support for Intelligent Agents
- Question & answer period

# WHAT IS THE INTELLIGENT AGENTS TOOL?

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# WHAT DOES “INTELLIGENT AGENT” MEAN?

An intelligent agent is a software that **assists people** and **acts on their behalf.**

Intelligent agents work by allowing people to **delegate work** that they could have done, to the agent software.

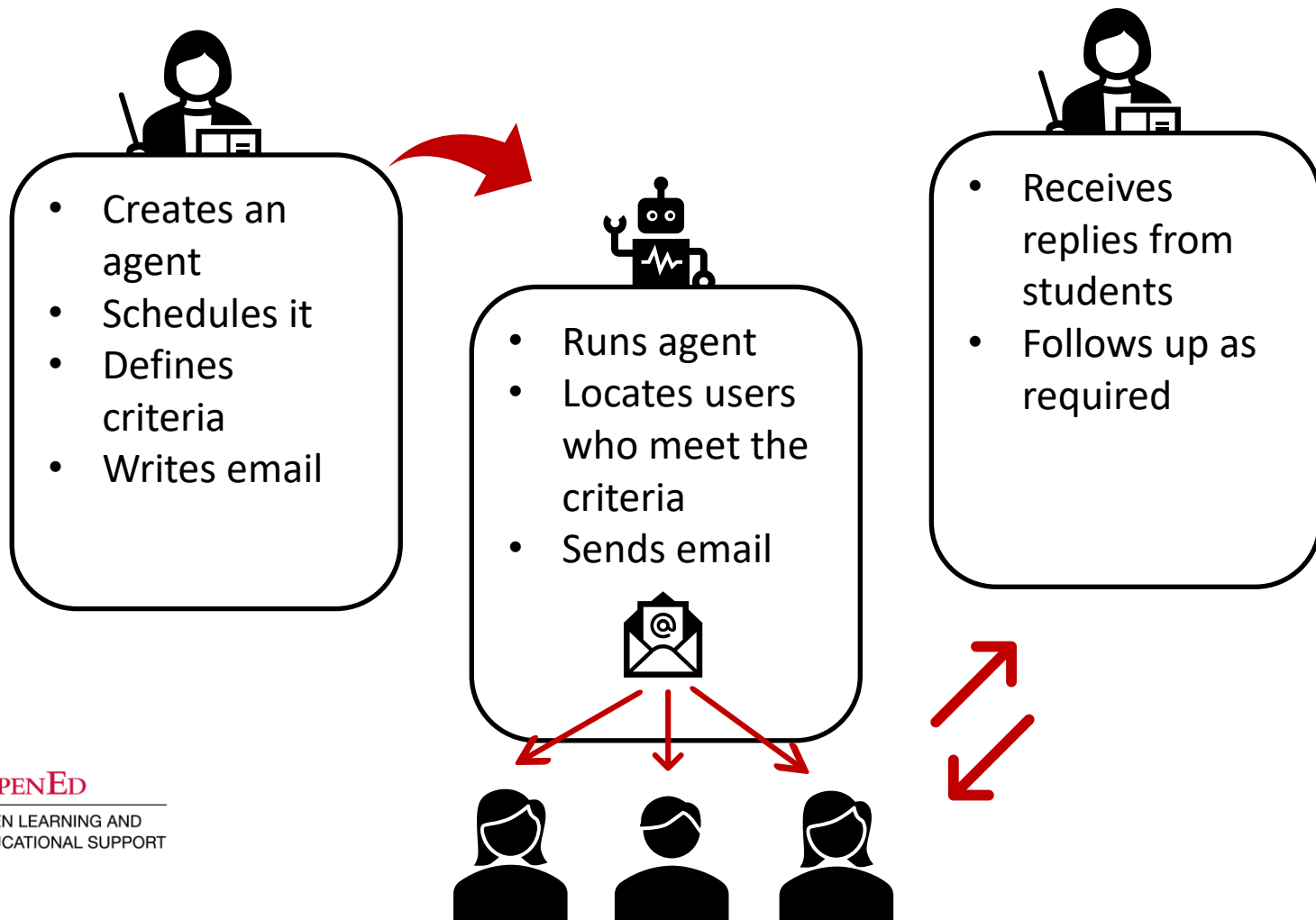
- [Hanh Tran & Thaovy Tran](#)

# WHAT DOES THE INTELLIGENT AGENTS TOOL DO?

The Intelligent Agents (IA) tool in CourseLink assists instructors and acts on their behalf by allowing them to delegate work that they could have done, but may have been difficult due to class size, access to data, etc.

The Intelligent Agents tool automates the process of sending emails composed by course instructors to course participants when they meet (or do not meet) certain criteria.

# HOW INTELLIGENT AGENTS WORK



## A SIMPLE PRACTICAL EXAMPLE

Your course has been under a way for a week, and you want give a nudge to any students who have not yet accessed your course site.

Let's compare how you would do this manually vs. how you would do this using Intelligent Agents.

# OPTION 1: DO IT MANUALLY...

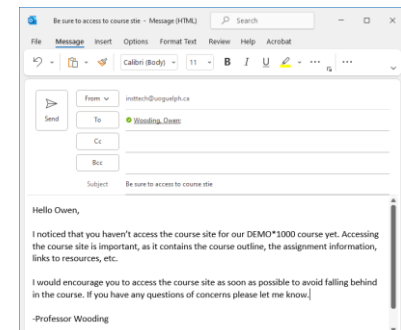
- Access your Classlist tool
- Look for all the students that have no value under the last accessed column
- Write down or copy and paste all their email addresses
- Compose a message
  - Make it impersonal and send it all your students using the BCC field
  - Send individual personalized emails to each student
- Hope that no students access the course site between the time you checked the Classlist and the time you sent your email(s)



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Role	Last Accessed ▲
Student	
Student	May 12, 2022 11:14 AM





## OPTION 2: USE INTELLIGENT AGENTS

- Create an intelligent agent
- Schedule it to run at a specific date/time
- Set it to send to those with the registered student role
- Set the condition to “has not accessed the course in the last [10] days”
- Compose your message (use replacement strings to personalize it – Hello [Owen], Hello [Carolyn], etc.)
- Save the agent

✓ Enable ✗ Disable 🗑 Delete ✎ Bulk Edit

<input type="checkbox"/>	Agent	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	<a href="#">Have not accessed course site (Week 1)</a> ▾ This notification goes out to any students who have not accessed the course site in the last 10 days. Sends on Monday of Week 2 at 8:30 am.	2 users identified	6 minutes ago	Tuesday, May 17, 2022 8:30 AM EDT

**BONUS:** Copy your agent to the next offering of the course, update the send date for that semester, and enable the agent.

# EXAMPLES OF INTELLIGENT AGENT USES

This is not an exhaustive list. There are many ways to leverage intelligent agents.

# INTELLIGENT AGENT USES

Intelligent Agents leverage CourseLink's **Release Conditions** option to identify who should receive a message.

As a result, there are countless ways agents can be leveraged depending on what other CourseLink tools you use in your course.

We will explore examples from the following tools today:

- Dropbox
- Discussions
- Quizzes
- Content

# INTELLIGENT AGENT USES – DROPBOX

There are **4 release conditions** that are applicable to the **Dropbox tool** within Intelligent Agents:

- Submission to dropbox
- Receive feedback on dropbox submission
- Score on associated rubric
- No submission to dropbox

Let's look at **two** of these options.

# INTELLIGENT AGENT USES – DROPBOX

## Receive feedback on dropbox submission

This condition can be used to help encourage students to review the feedback they have been provided.

- When feedback is published, students with feedback receive an email message from the instructor
- You may craft the message to:
  - Remind them why reviewing feedback is important
  - Explain how it is accessed on CourseLink
  - Provide them the option to contact you (or a TA) if they have any questions about their feedback

**TIP:** We recommend this be set as a manually triggered agent

**Bonus:** Copy the agent and reuse it for other Dropbox folders!

# INTELLIGENT AGENT USES – DROPBOX

## No submission to dropbox

This condition can be used to reach out to students who have not submitted on/near the due date for an assignment.

- The agent checks to see which students have not yet submitted to a specific Dropbox folder
- Identified students receive an email from the instructor
- You may craft the email to:
  - Remind them of the due date
  - Inform them of any official late period/penalties
  - Ask that they contact you if they are experiencing any issues preventing them from submitting on time

**TIP:** We recommend this be set as a scheduled agent

**Bonus:** Copy the agent and reuse it for other Dropbox folders!

# INTELLIGENT AGENT USES – DISCUSSIONS

There are **3 release conditions** that are applicable to the **Discussions tool** within Intelligent Agents:

- Posts authored in topic
- Score on associated rubric
- No posts authored in topic

Let's look at **two** of these options.

# INTELLIGENT AGENT USES – DISCUSSIONS

## Posts authored in topic

This condition lets you set a threshold of how many discussion posts must be made to trigger an email to a student.

This condition offers a few potential uses:

- Encourage students to post more if they have only posted once to drive engagement and participation
- Let students know when they have met a pre-determined post requirement
- Reach out to students who are driving conversation to thank them or possibly to ask them to allow others to speak

**TIP:** This condition lets you choose between new threads or new threads and replies in the post count.

**Bonus:** Copy the agent & reuse it for other discussion topics!



# INTELLIGENT AGENT USES – DISCUSSIONS

## No posts authored in topic

This condition lets you send an email message to any students who have not posted to a specific discussion topic.

This condition offers a few of potential uses:

- Encourage students to post who might be less inclined to do so than others
- Remind students to post if they are being assessed or if there is expected number of posts requirement
- Provide instructions on how to post and examples of what they may want to include when authoring a thread

# INTELLIGENT AGENT USES – QUIZZES

There are **5 release conditions** (3 applicable) that are associated with the **Quizzes tool** within Intelligent Agents:

- Score on a quiz
- Completed quiz attempt
- No completed quiz attempt
- Score on selected questions (N/A - requires objectives)
- Score on associated rubric (N/A - rubrics not typically used in Quizzes)

Let's look at **one** of these options.

# INTELLIGENT AGENT USES – QUIZZES

## Score on a quiz

This condition lets you send an email message to any students who achieve a score within a certain range on a quiz. Includes greater than, less than, equal to, and between options when setting values.

This condition offers the ability to:

- Congratulate/encourage students that performed well
- Aid students who did poorly/provide links to resources
- Give students an opportunity to connect with you for assistance via a reply

**TIP:** If using multiple messages for the same quiz, be sure to label and describe the agents well to tell them apart & test!

**Bonus:** Combine multiple conditions like scoring low on one quiz and high on the next one to acknowledge improvement.

# INTELLIGENT AGENT USES – CONTENT

There are **5** release conditions that are applicable to the **Content tool** within Intelligent Agents:

- Visited content topic
- Visited all content topics
- Not visited content topic
- Completed content topic
- Not completed content topic

Let's look at **one** of these options.

**Note 1:** CourseLink sets content that is visited as complete by default (no difference unless that setting is changed).

**Note 2:** Be careful using content visits as triggers. Some students may download & view offline, or may have viewed on a friend's computer/account if they live together, etc.

# INTELLIGENT AGENT USES – CONTENT

## Not visited content topic

This condition lets you send an email message to any students who have not accessed a content topic by clicking the link from their account.

This condition offers the ability to:

- Reach out to students who may not have accessed some important course materials through the Content tool
  - E.g., Course Outline, assignment information, study resources for a midterm or exam
- Provide reminders on how you are using the Content tool for your course (not all instructors use it the same way)

**TIP:** Try starting agent messages with content access conditions with a line like: “According to CourseLink’s logs, it appears your account has not accessed [X]. If you have accessed this material another way, please disregard this message.”

# INTELLIGENT AGENT USES – OTHER TOOLS

In addition to the tools covered, Intelligent Agent release conditions can also be used with the following tools:

- Awards
- Checklist
- Classlist
- Grades
- Surveys

# INTELLIGENT AGENT USES – SUMMARY

The examples provided today are just *some* of the ways the IA tool can help instructors perform tasks that may have seemed otherwise daunting to undertake.

- Keep in mind that multiple release conditions for same tool or different tools can be combined into a single agent allowing even more specific messaging.
- Consider ways you might be able to leverage the Intelligent Agents tool to help you engage with your students and improve the experience in your course.

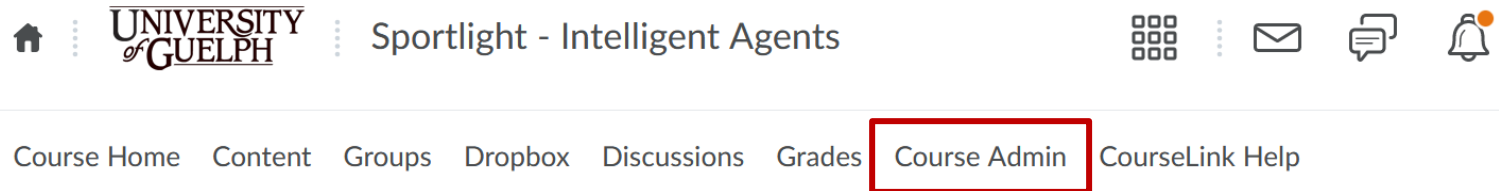
# ACCESSING INTELLIGENT AGENTS

(& adjusting settings)



# ACCESSING INTELLIGENT AGENTS

Intelligent Agents are accessed through the Course Admin link on your course site's navigation bar.



# ACCESSING INTELLIGENT AGENTS

From the Course Admin page, Intelligent Agents is listed under the **Communication** heading.

## Communication

 [Announcements](#)

 [Intelligent Agents](#)

 [Chat](#)

 [Discussions](#)

# ACCESSING INTELLIGENT AGENTS

Before you begin creating agents, you will first want to adjust the default settings by clicking the **Settings** link.

Agent List

 Settings

New Agent

Edit Categories

More Actions ▼

View: All agents ▼

Apply

# ACCESSING INTELLIGENT AGENTS

Switch the option from “Use system defaults” to “**Set custom values for this course**” and enter a “**from**” name and the “**reply-to**” email address for your communications.

## Intelligent Agents Settings

Use the system defaults

Name that emails come from      Reply-To address for responses  
courselink@uoguelph.ca      courselink@uoguelph.ca

Set custom values for this course

Name that emails come from      Reply-To address for responses  
Professor Wooding      owooding@uoguelph.ca

These settings will affect all future emails sent by an agent.

**Note 1:** Failing to change these settings means your messages come from courselink@uoguelph.ca (and they receive replies)

**Note 2:** If you are part of a teaching team, these values can be set to a general name and email (e.g., CODE\*1000 Team and code1000@uoguelph.ca)

# CREATING & TESTING YOUR AGENTS

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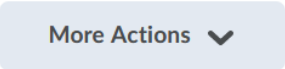
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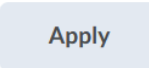
# CREATING INTELLIGENT AGENTS

After you have adjusted your settings, you're all set to start creating agents by clicking the **New Agent** button.

## Agent List

 [Settings](#)

View:  

# INTELLIGENT AGENTS COMPONENTS

The Intelligent Agent creation process is comprised of 4 components:

**1. Details**

Set the name, description, category, and status.

**2. Scheduling**

Determine when and how often the agent should run.

**3. Criteria**

Who (role) and what (condition) triggers the agent.

**4. Actions**

How often should the message send and what message should be sent/who should receive it.

# CREATING AN AGENT: DETAILS

While the Agent Name field is the only *required* option, we recommend including a detailed description of what the agent does and when/how it runs.

Agent Name: \*

Description:

Category:

No Category ▼

Add Category

Status:

Agent is enabled



# CREATING AN AGENT: DETAILS

Use categories to help with organization and locating agents, especially when using many different agents in a course.

- Use any categorization system (e.g., by tool – Discussions, Dropbox, etc., by trigger – manual/scheduled, by type – reminder, encouragement, etc.

Agent Name: \*

Description:

Category:

Status:

Agent is enabled

# CREATING AN AGENT: DETAILS

Agents are **not enabled by default** when they are created, but you may enable them instantly by checking the “Agent is enabled” box. Alternatively, you may enable/disable agents from the Agent List.

Agent Name: \*

Description:

Category:

No Category ▾

Add Category

Status:

Agent is enabled

## Agent List

New Agent

Edit Categories

More Actions ▾

✓ Enable

✗ Disable

🗑 Delete

✎ Bulk Edit

# CREATING AN AGENT: SCHEDULING

Scheduling ▼

Frequency

No Schedule ▼

No Schedule

One-Time Run

Hourly ▶

Daily

Weekly

Monthly ▼

Annually

# CREATING AN AGENT: SCHEDULING

Agents can be set to run on a schedule, or as a one-time run. Alternatively, you may choose to have no schedule and run the agent manually.

The following scheduling options are available:

- **One-Time Run** (New option! You set a date and time.)
- Hourly (every X hours)
- Daily (every X days)
- Weekly (every X weeks)
- Monthly (every X months)
- Annually (every X years)

**Note:** For all options you may set a specific time for the agent to run. For options other than one-time run, you may set a date range (e.g., every 2 days from Jun. 1 to July 31)

# CREATING AN AGENT: CRITERIA

## Criteria

**Role in Classlist**

All users **visible** in the Classlist

Users with specific roles:

**Take Action on Activity**

Login Activity

User has not logged in during the last  day(s)

User has logged in during the last  day(s)

Course Activity

User has not accessed the course in the last  day(s)

User has accessed the course during the last  day(s)

**Release Conditions**

## CREATING AN AGENT: CRITERIA

Criteria allows you to select what **roles** (e.g., Registered Student), **actions** (CourseLink login/accessing your course site), and **conditions** (Release Conditions) will trigger the agent to send a communication.

### Recommendation:

In most cases you will want to select the specific role – Registered Student, to ensure only students receive communications (not TAs).

**Tip:** When adding multiple release conditions, you may select whether satisfying **ANY** or **ALL** (default) conditions is required to trigger the agent to send an email.

# CREATING AN AGENT: ACTIONS

## Actions

**Repetition**

Take action only the first time the agent's criteria are satisfied for a user

Take action every time the agent is evaluated and the agent's criteria are satisfied for a user

[What Action Repetition setting should I use?](#)

**Send an Email**

Send an email when the criteria are satisfied

# CREATING AN AGENT: ACTIONS

Actions lets you define **how often** a communication should be sent. There are two options:

1. Take action **only the first time** the agent's criteria are satisfied for a user (default)
2. Take action **every time** the agent is evaluated and the agent's criteria are satisfied for a user

The first option means that a student will never receive the same email twice, even if the agent runs more than once and they meet the conditions to trigger the email.

The second option will send the email every time it is run, and the student qualifies.



## CREATING AN AGENT: ACTIONS

Actions is also where the **email communication is composed**. It allows you to use various **replacement strings** in the email to send separate emails to specific participants (students)

To send emails directly to the participant who meets the criteria of the agent, populate the “To:” field with the following replacement string: **{InitiatingUser}**

# CREATING AN AGENT: ACTIONS

For the subject and body of the message, additional replacement strings can be leveraged to help personalize the message for the students. These include:

- **{OrgName}** - The name of the organization. **[CourseLink]**
- **{OrgUnitCode}** - The code for the org unit. **[CODE\_1000\_01\_F22]**
- **{OrgUnitName}** - The name of the org unit. **[CODE\*1000 (01) F22 – Course Title]**
- **{OrgUnitStartDate}** - The start date specified for the org unit. **[Course site opens]**
- **{OrgUnitEndDate}** - The end date specified for the org unit. **[Course site closes]**
- **{InitiatingUserFirstName}** - The first name of the initiating user. **[Owen]**
- **{InitiatingUserLastName}** - The last name of the initiating user. **[Wooding]**
- **{InitiatingUserUserName}** - The username of the initiating user. **[owooding]**
- **{InitiatingUserOrgDefinedId}** - The Org Defined ID of the initiating user. **[87654321]**
- **{LoginPath}** - The address of the login path for the site. **[CourseLink login page]**
- **{LastCourseAccessDate}** - The date the initiating user last accessed the course.
- **{LastLoginDate}** - The date the initiating user last logged in. **[Accessed CourseLink]**

# CREATING AN AGENT: ACTIONS

## Example Email (Replacement Strings)

**To:** {InitiatingUser}

**Subject:** {OrgUnitName} Assignment 1 Due Today!

**Body:** Hello {InitiatingUserFirstName},

This is a quick reminder that assignment 1 for {OrgUnitName} must be submitted to the Assignment 1 Dropbox folder by 11:59 PM ET today. At the time this message was sent, there was no submission yet from your account.

If you are experiencing any technical difficulties with you submission, please contact CourseLink support at x.56939 before 8:30 PM ET.

If you are experiencing other issues that are impacting your ability to submit on time, please connect with me before the deadline.

Thanks,  
Professor Wooding

# CREATING AN AGENT: ACTIONS

## Example Email (Student Receives)

To:

owooding@uoguelph.ca

Subject:

CODE\*1000 (01) F22 – Course Title Assignment 1 Due Today!

Body:

Hello **Owen**,

This is a quick reminder that assignment 1 for **CODE\*1000 (01) F22 – Course Title** must be submitted to the Assignment 1 Dropbox folder by 11:59 PM ET today. At the time this message was sent, there was no submission yet from your account.

If you are experiencing any technical difficulties with you submission, please contact CourseLink support at x.56939 before 8:30 PM ET.

If you are experiencing other issues that are impacting your ability to submit on time, please connect with me before the deadline.

Thanks,  
Professor Wooding

# CREATING AN AGENT: ACTIONS

## Example Email (Student Receives)

To:

cacreigh@uoguelph.ca

Subject:

CODE\*1000 (01) F22 – Course Title Assignment 1 Due Today!

Body:

Hello **Carolyn**,

This is a quick reminder that assignment 1 for **CODE\*1000 (01) F22 – Course Title** must be submitted to the Assignment 1 Dropbox folder by 11:59 PM ET today. At the time this message was sent, there was no submission yet from your account.

If you are experiencing any technical difficulties with you submission, please contact CourseLink support at x.56939 before 8:30 PM ET.

If you are experiencing other issues that are impacting your ability to submit on time, please connect with me before the deadline.

Thanks,  
Professor Wooding

# HOW TO GET THE MOST FROM YOUR AGENTS

A few simple tips.

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# GETTING THE MOST OUT OF YOUR AGENTS

As we have seen, Intelligent Agents is a powerful and helpful tool that can increase engagement with your students without bogging you down with tracking down who should receive various messages.

However, **there are 4 simple tips** that we recommend you consider when working with the Intelligent Agents tool.

## TIP #1: DON'T OVER DO IT!

As with any sort of communication, the impact of the message can be lost if the receiver is being bombarded with similar messages in a short period of time.

- Before creating an agent, first consider if a course announcement would be just as (or perhaps more) effective
- If you are using a repeating agent with a daily or hourly frequency, carefully consider whether you want that message to go out every time the criteria are satisfied
- If you are using a many agents, consider how many may go to the same students in the span of a few days



## TIP #2: WRITE THE EMAIL IN YOUR OWN VOICE

While the automation of intelligent agents is great, there is no need for your email to *sound* automated.

- Write your message in a way that is consistent with the tone of voice and personality you use in class
- The more it sounds like your voice, the more likely your students are to think it is a personalized email from you to them rather than a canned message
- Use replacement strings (especially first name) to give it a personal impact

## TIP #3: CREATE AGENTS THAT YOU CAN REUSE

Because Intelligent Agents can be copied from one course site to another, if you write emails in a way that avoids the need to edit, they can quickly be re-enabled/rescheduled in your next offering.

- Use replacement strings to identify the course name/code
- Avoid use of specific dates (use “due today” instead of “due May 12<sup>th</sup>”)
- If you have components of the message that do need to be updated, make a note of them in the Agent description

## TIP #4: BE PREPARED TO FOLLOW-UP

Intelligent Agents are great for connecting with your students, but the tool can only handle the initial email.

- Be prepared to continue the conversation with students who follow-up and allot time for that in your day
- If you have a large class, consider using a generic email address (e.g., code1000@uoguelph.ca) that the whole teaching team can access and share the load

# INTELLIGENT AGENTS SUPPORT

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# INTELLIGENT AGENTS SUPPORT

Intelligent Agents are supported by the CourseLink Support team.

## CourseLink Support

**Email:** [courselink@uoguelph.ca](mailto:courselink@uoguelph.ca)

**Phone:** X. 56939

## Hours:

Mon-Fri. 8:30 AM-8:30 PM, Sat. 10 AM-4 PM, Sun. 12-6 PM

CourseLink Support also has a resource page for Intelligent Agents:

<https://support.opened.uoguelph.ca/instructors/courselink/tools/content/intelligent-agents>