

Engineering Strategies and Practice II:

Project 135: Redesigning Degree Explorer

(for Arts & Science students)

Client: Sinisa Markovic

Katakyie Addai, Sarang Nerkar, Ross Phillips, Michael Woloszyn, Bob Xiao
Yang

1.0-1.3 Introduction (Michael)

This is just a placeholder

Simplifying Course Planning

- Course Planning at U of T (Michael Woloszyn)
- Requirements for a New Design (Bob Xiao Yang)
- Detailed Designed (Sarang Nerkar)
- Implementing the Design (Katakyie Addai)
- Design Impacts (Ross Phillips)

Course Planning at U of T

(Michael Woloszyn)

- Arts & Science students at the University of Toronto have access to over 180 programs and 3500 courses [1].
- Over 23 000 full-time and 3 000 part-time undergraduates study at the university [2].
- Ideally, the course planning process should allow a diverse range of students to enrol in the courses which best satisfy their needs.



Figure 1. Currently students are overwhelmed with choices [0]

Degree Explorer

- To aid students in the course selection process the University of Toronto has developed the tool “Degree Explorer”
- Degree Explorer currently allows students to fit courses onto a timetable and see if they meet the requirements to graduate

The screenshot shows the 'Planner' section of the Degree Explorer website. At the top, it says 'Planner - Woloszyn, Michael Dariusz'. Below that is a note: 'Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.' There are tabs for 'Completed', 'Unsuccessful', 'In Progress', 'Pre/co-requisite issue', and 'Assessed OK'. A 'Save Plan As' and 'PDF Report' button are also present. The main area shows a timeline from Fall 2013 to Summer 2015. Courses listed in the Winter 2014 slot are ANT100Y1, ENG140Y1, MAT137Y1, GGR348H1, and GGR373H1. Below this is a 'Degree Program of Study' table:

Code	Title	Start Session	Status	Estimated Progress	Result:	Confirmed
+ AS HBA	Honours Bachelor of Arts	Fall 2013	Active	<div style="width: 20%; background-color: #555; height: 10px;"></div>	Incomplete	
+ AEELEBASC	Bachelor of Applied Science	Fall 2013	Active	<div style="width: 10%; background-color: #ccc; height: 10px;"></div>	Incomplete	

Figure 2. The current design of a course planning section “Course Planner” found on Degree Explorer. [3]

Problems with Degree Explorer

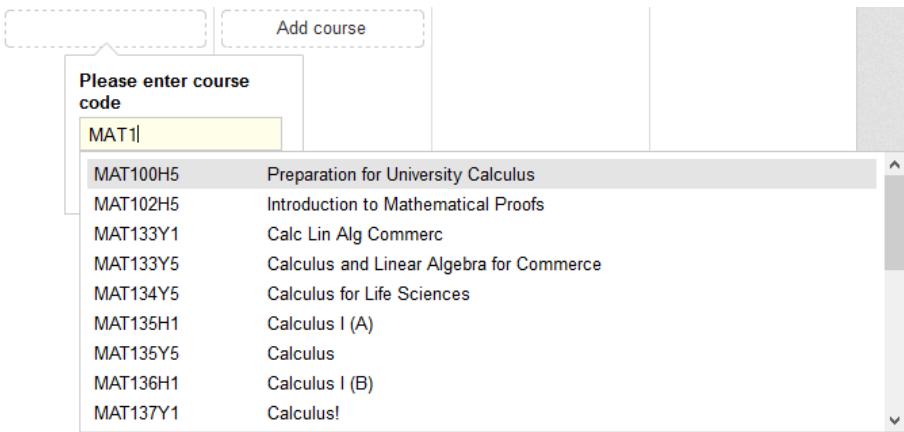


Figure 3. The current process of adding a course in Degree Explorer requires the student to have already done their course research ahead of time. [4]

- Students must research their courses outside of Degree Explorer
- Weakly meets its goal of “assist [ing] students in making informed choices in course and program selection” [5]
- Currently does nothing to help students filter through the 3500+ courses offered

What's Missing



What We Set Out to Do

- Redesign Degree Explorer keeping in mind the following functions:
 - Display available courses and their relevant information.
 - Select desired courses.
 - Enrol in selected courses.
 - Systematically organize courses.
 - Keep track of progress in courses and programs.

Additional Functions

- Some functions result as of those mentioned earlier:
 - Analyze statistics (usage, peak demand time,etc)
 - Group previously existing resources (ROSI, Course Finder, etc.) into one utility
 - Provide information about a student to Departments, Colleges, and Registrars
 - Maintain academic history.
 - Recommend courses and majors for students.

1.4 - 1.7 Rest of PR (Bob)

This is just a placeholder

Goals

- Time - < 0.5 hour
- Information - < 3 external websites
- Notification - regularly
- Pages Per Visit - 4.92 -> 3
- Bounce Rate - 11.37% -> 5%
- Loading time - < 3 seconds

Service Environment

- Physical Environment
 - Platform that can access the Internet
- Living things
 - Arts & Sci students
 - Professors
 - College counselors
 - Staffs in the Office of Registrar
- Virtual Environment
 - Internet access
 - Viruses

Who's Involved?

Stakeholder	Interest
Departments	Responsible for administering courses to students [6]
Colleges	Providing academic counseling [7]
Registrars	Coordinate course enrolment and registration [8] Provide information to students[9] Academic record keeping[10]
Professors	Maintain contact with students[11] Organization of information for courses [11]

Client Ethics and Values

- Obedience of the law
- Responsibility to present accurate information
- Formal Communication
- Accommodating individuals with disabilities
- Avoiding third-party advertisements on a university website

2.0 - Detailed Design (Sarang)

This is just a placeholder

The Opening Screen for a New User of Degree Explorer

The screenshot shows the Degree Explorer interface for a new user. At the top, the University of Toronto logo and "UNIVERSITY OF TORONTO" are displayed, followed by "FACULTY OF ARTS & SCIENCE" and "UAT". To the right, the user "woloszyn" is logged in, with a "Logout" button. The title "Degree Explorer" is centered above a navigation bar with tabs: "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". Below the navigation bar, the user's name "Planner - Woloszyn, Michael Dariusz" is shown. A note states: "Any courses or programs listed below are for planning purposes only, and are meant to assist you in making informed choices in course and program selection. Any programs on this website will not automatically enregister you or guarantee that you are eligible to enrol. All registration is done through the University of Toronto's Student Record system. For detailed information about enrollment, please contact the appropriate faculty or department." A "Question 3" section is visible, showing a "Plan 1" with a "Planner" tab and a "Completed" status. A large, semi-transparent overlay box contains the text "Do you like being tested with MULTIPLE CHOICE questions?" and four options: "A) Yes", "B) No", "C) Remind me later", and "D) Skip this kind of questions".

Skipping the Multiple Choice Questions

The image shows a screenshot of the University of Toronto Faculty of Arts & Science Degree Explorer Planner. At the top, the university logo and "UNIVERSITY OF TORONTO" are visible, followed by "FACULTY OF ARTS & SCIENCE" and "UAT". To the right, there is a user profile "woloszyn" and a "Logout" button. The main navigation bar includes "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". Below the navigation, the title "Planner - Woloszyn, Michael Dariusz" is displayed. A note states: "Any courses or programs listed below are for planning purposes only, and are meant to assist you in making informed choices in course and program selection. Any programs on this website will not automatically enregister you, or guarantee that you are eligible to enrol. All registration is done through the University's official registration system. For detailed information about enrollment, please refer to the University's official registration instructions." A section titled "Question 3" asks: "Do you like being tested with MULTIPLE CHOICE questions?". It provides four options: "A) Yes", "B) No", "C) Remind me later", and "D) Skip this kind of questions". The option "C) Remind me later" is circled in red.

Temporarily Skipping the Multiple Choice Questions

The image shows a screenshot of the University of Toronto Faculty of Arts & Science Degree Explorer Planner. At the top, the university logo and "UNIVERSITY OF TORONTO" are visible, followed by "FACULTY OF ARTS & SCIENCE" and "UAT". To the right, there are user details "woloszyn" and "Logout". The main navigation bar includes "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". Below the navigation, it says "Planner - Woloszyn, Michael Dariusz". A note states: "Any courses or programs listed below are for planning purposes only, and are meant to assist you in making informed choices in course and program selection. Any programs on this website will not automatically enregister you, or guarantee that you are eligible to enrol. All registration is done through the University's official registration system. For detailed information about enrollment, please contact the relevant faculty or department." A section titled "Question 3" asks, "Do you like being tested with MULTIPLE CHOICE questions?". It lists four options: "A) Yes", "B) No", "C) Remind me later", and "D) Skip this kind of questions". The option "C) Remind me later" is circled in red.

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs listed below are for planning purposes only, and are meant to assist you in making informed choices in course and program selection. Any programs on this website will not automatically enregister you, or guarantee that you are eligible to enrol. All registration is done through the University's official registration system. For detailed information about enrollment, please contact the relevant faculty or department.

Question 3

Do you like being tested with MULTIPLE CHOICE questions?

A) Yes B) No

C) Remind me later D) Skip this kind of questions

Permanently Skipping the Multiple Choice Questions

The image shows a screenshot of the University of Toronto Faculty of Arts & Science Degree Explorer Planner. At the top, the university logo and "UNIVERSITY OF TORONTO" are visible, followed by "FACULTY OF ARTS & SCIENCE" and "UAT". To the right, there are user details "woloszyn" and "Logout". The main navigation bar includes "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". Below the navigation, the title "Planner - Woloszyn, Michael Dariusz" is displayed. A note at the top of the planner area states: "Any courses or programs listed below are for planning purposes only, and are meant to assist you in making informed choices in course and program selection. Any programs on this website will not automatically enregister you, or guarantee that you are eligible to enrol. All registration is done through the University's official registration system. For detailed information about enrollment, please contact the relevant faculty or department." A section titled "Question 3" asks, "Do you like being tested with MULTIPLE CHOICE questions?". It includes a "Plan 1" tab and a "Planner" tab. The poll options are: A) Yes, B) No, C) Remind me later, and D) Skip this kind of questions. Option D is circled in red.

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs listed below are for planning purposes only, and are meant to assist you in making informed choices in course and program selection. Any programs on this website will not automatically enregister you, or guarantee that you are eligible to enrol. All registration is done through the University's official registration system. For detailed information about enrollment, please contact the relevant faculty or department.

Question 3

Do you like being tested with MULTIPLE CHOICE questions?

A) Yes B) No

C) Remind me later D) Skip this kind of questions

The New Look of the PLANNER Tab in Degree Explorer

The screenshot shows the Degree Explorer interface on the University of Toronto Faculty of Arts & Science website. The top navigation bar includes links for CURRENT STATUS, PLANNER (which is highlighted in blue), ACADEMIC HISTORY, CONTACT US, and HELP. The user is logged in as 'woloszyn'.

The main content area is titled 'Planner - Woloszyn, Michael Dariusz'. It contains a message: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment."

Below this message, there is a section for 'Plan 1' with a '+' button. It includes a 'Planner' section with a 'Save Plan As' button, a 'Reset All' button, and a 'PDF Report' link. There are also status filters: Completed (green), Unsuccessful (red), In Progress (blue), Pre/co-requisite issue (orange), and Assessed OK (green).

The planner grid shows course offerings for Fall 2014, Winter 2015, and Summer 2015. Courses listed include CHM412H5 (Assessed OK), ANT200Y1 (Assessed OK), and CHM211H5 (Pre/co-requisite issue). A cursor is hovering over the CHM211H5 row.

A sidebar on the right contains a search bar with placeholder text 'Course code, Prof., Full name, Key words,' and a magnifying glass icon. Below the search bar is a 'Suggestions:' section with the heading 'S- suggestion based on quiz' and a red box containing the text 'CHM311H5'.

At the bottom right, there is a 'Browse' button with a magnifying glass icon and the text 'F3'.

Working on Different Plans

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. At the top, the logo of the University of Toronto Faculty of Arts & Science (UAT) is displayed next to the text "Degree Explorer". The top navigation bar includes links for "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". The user is logged in as "woloszyn" and has the option to "Logout".

The main content area is titled "Planner - Woloszyn, Michael Dariusz". It contains a message: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment." Below this message, there is a section titled "Plan 1" with a red circle around it, followed by a plus sign (+). A "Planner" link is also present.

Below the "Plan 1" section, there are status indicators: "Completed" (green), "Unsuccessful" (red), "In Progress" (blue), "Pre/co-requisite issue" (orange), and "Assessed OK" (green). There is also a "Save Plan As" button, a "Reset All" button, and a "PDF Report" button.

The course planning grid shows courses for different semesters:

Fall 2014	Winter 2015	Summer 2015
O CHM412H5	O ANT200Y1	! CHM211H5

Fall 2015	Winter 2016	Summer 2016

A vertical scrollbar is visible on the right side of the planning grid.

To the right of the planning grid, there is a search bar with the placeholder "Course code, Prof., Full name, Key words," and a magnifying glass icon. Below the search bar, a "Suggestions:" section is shown with the text "S- suggestion based on quiz" and a button labeled "CHM311H5".

At the bottom right, there is a "Browse" button with a magnifying glass icon and the text "F3".

Working on a Plan

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and 'MyBucket'. The main menu tabs are 'CURRENT STATUS', 'PLANNER' (which is selected), and 'ACADEMIC HISTORY'. Below the tabs, it says 'Planner - Woloszyn, Michael Dariusz'. A note states: 'Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.' The 'Planner' section shows a timeline from Fall 2014 to Summer 2016. Courses listed include CHM412H5 (Completed), ANT200Y1 (Assessed OK), and CHM211H5 (Pre/co-requisite issue). A red circle highlights the Fall 2014 through Summer 2015 period. To the right, a sidebar titled 'Suggestions:' shows a suggestion for CHM311H5 based on a quiz. At the bottom right is a 'Browse' button.

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

MyBucket

CURRENT STATUS PLANNER ACADEMIC HISTORY

CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner

Save Plan As | Reset All | PDF Report

Completed Unsuccessful In Progress Pre/co-requisite issue Assessed OK

Fall 2014 Winter 2015 Summer 2015

CHM412H5 ANT200Y1

! CHM211H5

Fall 2015 Winter 2016 Summer 2016

Suggestions:
S- suggestion based on quiz

CHM311H5

Browse

Vertical Scrolling(Proposed Design) as Opposed to Horizontal Scrolling(Old Design)

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and links for 'CURRENT STATUS', 'PLANNER' (which is highlighted in blue), 'ACADEMIC HISTORY', 'CONTACT US', and 'HELP'. A user profile 'Planner - Woloszyn, Michael Dariusz' is displayed. A message states: 'Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.' On the left, there's a 'Planner' section with a 'Plan 1 +' button, a 'Save Plan As | Reset All | PDF Report' link, and status filters: 'Completed' (green), 'Unsuccessful' (red), 'In Progress' (blue), 'Pre/co-requisite issue' (orange), and 'Assessed OK' (green). Below this are two rows of course cards for 'Winter 2015': 'CHM412H5' (green), 'ANT200Y1' (green), and 'CHM211H5' (orange). A red circle highlights the vertical scroll bar on the right side of the page. To the right, a sidebar titled 'Suggestions:' shows a suggestion for 'CHM311H5' based on a quiz. The bottom right corner features a 'Browse' button with a magnifying glass icon and the text 'f3'.

Adding New Plans

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. At the top, the logo of the University of Toronto Faculty of Arts & Science (UAT) is displayed next to the text "Degree Explorer". The top navigation bar includes links for "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". The user is logged in as "woloszyn" and has the option to "Logout". A "MyBucket" icon is also present.

The main content area is titled "Planner - Woloszyn, Michael Dariusz". It contains a message: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment." Below this message, there is a section for "Plan 1" with a red circle and a plus sign icon. The "Planner" section includes buttons for "Save Plan As", "Reset All", and "PDF Report".

Below the planner section, there are color-coded status indicators: green for "Completed", red for "Unsuccessful", blue for "In Progress", orange for "Pre/co-requisite issue", and grey for "Assessed OK".

The interface displays course offerings for several semesters:

- Fall 2014:** CHM412H5 (Assessed OK)
- Winter 2015:** ANT200Y1 (Assessed OK)
- Summer 2015:** CHM211H5 (Pre/co-requisite issue)
- Fall 2015:** (empty)
- Winter 2016:** (empty)
- Summer 2016:** (empty)

A vertical scrollbar is visible on the right side of the content area. On the right side of the page, there is a search bar with placeholder text "Course code, Prof., Full name, Key words," and a magnifying glass icon. Below the search bar, a "Suggestions:" section lists "CHM311H5" with the note "S- suggestion based on quiz".

At the bottom right, there is a "Browse" button with a magnifying glass icon and the text "F3".

The New Suggestions Sidebar in Degree Explorer

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

C Completed U Unsuccessful P In Progress I Pre/co-requisite issue O Assessed OK

Fall 2014 Winter 2015 Summer 2015

O CHM412H5 O ANT200Y1

! CHM211H5

Fall 2015 Winter 2016 Summer 2016

Course code, Prof., Full name, Key words,

Suggestions:
S- suggestion based on quiz

CHM311H5

Browse

Search Bar

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. At the top, the university logo and "UNIVERSITY OF TORONTO" are displayed, followed by "FACULTY OF ARTS & SCIENCE" and "UAT". To the right, the user "woloszyn" is logged in, with a "Logout" button. Below the header, there is a navigation menu with tabs: "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP".

The main content area is titled "Planner - Woloszyn, Michael Dariusz". It contains a message: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment." There is also a "MyBucket" icon.

Below the message, there is a section for "Plan 1" with a "+" button. It includes a "Planner" section with filters: "Completed" (green), "Unsuccessful" (red), "In Progress" (blue), "Pre/co-requisite issue" (orange), and "Assessed OK" (grey). Buttons for "Save Plan As", "Reset All", and "PDF Report" are also present.

The interface displays course lists for different semesters:

- Fall 2014:** CHM412H5 (status: green)
- Winter 2015:** ANT200Y1 (status: grey)
- Summer 2015:** CHM211H5 (status: orange)
- Fall 2015:** (empty)
- Winter 2016:** (empty)
- Summer 2016:** (empty)

A vertical scroll bar is visible on the right side of the content area. A red circle highlights the search bar at the top of the right-hand sidebar, which contains a text input field for "Course code, Prof., Full name, Key words," and a magnifying glass icon. Below the search bar, a "Suggestions:" section is shown with a note: "S- suggestion based on quiz" and a highlighted suggestion: "CHM311H5".

At the bottom right, there is a "Browse" button with a magnifying glass icon and the text "f3".

Browse Button

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

Completed Unsuccessful In Progress Pre/co-requisite issue Assessed OK

Fall 2014 Winter 2015 Summer 2015

O CHM412H5 O ANT200Y1

! CHM211H5

Fall 2015 Winter 2016 Summer 2016

Course code, Prof., Full name, Key words,

Suggestions:
S- suggestion based on quiz

CHM311HS

F3

Branched Course Selection

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

C Completed U Unsuccessful P In Progress I Pre-/co-requisite issue O Assessed OK

Fall 2014 Winter 2015 Summer 2015

O CHM412H5 O ANT200Y1

I CHM211H5

Fall 2015 Winter 2016 Summer 2016

The image shows the University of Toronto Degree Explorer Planner interface. At the top, it displays the university logo, faculty name, and student name 'woloszyn'. Below the header are tabs for 'CURRENT STATUS', 'PLANNER' (which is selected), 'ACADEMIC HISTORY', 'CONTACT US', and 'HELP'. The 'PLANNER' section shows 'Plan 1' and a status bar with course counts. It includes filters for course status (Completed, Unsuccessful, In Progress, Pre-/co-requisite issue, Assessed OK) and a 'Save Plan As' button. Below this are two rows of course offerings for Fall 2014, Winter 2015, and Summer 2015. The Winter 2015 row shows 'CHM412H5' and 'ANT200Y1' as completed, and 'CHM211H5' as a pre-requisite issue. The bottom row shows Fall 2015, Winter 2016, and Summer 2016. To the right of the planner is a large course catalog section titled 'Degree Explorer'. It features a grid of course categories with red circles highlighting specific ones: 'Creative and Cultural Representations' (with various language options like Korean, Chinese, and French), 'Living Things and Their Environment', 'Thought, Belief, and Behavior', 'The Physical and Mathematical Universes', and 'Society and Its Institutions'. Each category has a small thumbnail image and a brief description. A cursor is visible over the 'Thought, Belief, and Behavior' category. The catalog also includes a sidebar with course codes (ENL200, ENL300) and a footer with navigation icons.

Suggestions in the Sidebar

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and a 'MyBucket' icon.

The main menu tabs are 'CURRENT STATUS', 'PLANNER' (which is selected), 'ACADEMIC HISTORY', 'CONTACT US', and 'HELP'.

The user is logged in as 'woloszyn'. Below the menu, it says 'Planner - Woloszyn, Michael Dariusz'.

A note states: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment."

The 'Planner' section shows 'Plan 1' and a list of courses:

- Fall 2014: CHM412H5 (Assessed OK)
- Winter 2015: ANT200Y1 (Assessed OK)
- Summer 2015: CHM211H5 (Pre/co-requisite issue)

Legend: C Completed, U Unsuccessful, P In Progress, I Pre/co-requisite issue, O Assessed OK.

Below the planner, there are sections for Fall 2015, Winter 2016, and Summer 2016, each with a 'Browse' button.

A red circle highlights a sidebar titled 'Suggestions:' with the sub-instruction 'S- suggestion based on quiz'. It lists 'CHM311H5'.

Hovering Over a Course

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and links for 'CURRENT STATUS', 'PLANNER' (which is active), 'ACADEMIC HISTORY', 'CONTACT US', and 'HELP'. Below the navigation is a message about planning purposes and enrollment via ROSI. The main area displays academic plans and courses. A search bar at the top right contains 'Course code, Prof., Full name, Key words,' with a magnifying glass icon. A red circle highlights the course 'CHM311H5' in the Winter 2015 section. A tooltip for 'CHM311H5' is visible, showing details: 'Course CHM311H5', 'Credit: 0.5 Semester: Fall', 'LEC: 3 h/wk BR:2', 'PRA: 3 h/wk', 'TUT: 1 h/wk', and 'Professor: J. Doe'. At the bottom right are 'Browse' and 'F3' buttons.

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner

Save Plan As | Reset All | PDF Report

C Completed U Unsuccessful P In Progress I Pre/co-requisite issue O Assessed OK

Fall 2014 Winter 2015 Summer 2015

O CHM412H5 O ANT200Y1

I CHM211H5

Fall 2015 Winter 2016 Summer 2016

Course code, Prof., Full name, Key words,

Suggestions:
S- suggestion based on quiz

CHM311H5

Course CHM311H5

Credit: 0.5 Semester: Fall
LEC: 3 h/wk BR:2
PRA: 3 h/wk
TUT: 1 h/wk
Professor: J. Doe

Browse F3

Information About the Course

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner page. At the top, the university logo and "UNIVERSITY OF TORONTO" are displayed, followed by "FACULTY OF ARTS & SCIENCE" and "UAT". To the right, the user "woloszyn" is logged in, with a "Logout" button. The main navigation menu includes "CURRENT STATUS", "PLANNER" (which is highlighted in blue), "ACADEMIC HISTORY", "CONTACT US", and "HELP". Below the menu, the title "Planner - Woloszyn, Michael Dariusz" is shown. A note states: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment." The "Planner" section displays a timeline from Fall 2014 to Summer 2016. Under "Fall 2014", "Winter 2015", and "Summer 2015", there are course entries: CHM412H5 (status: O), ANT200Y1 (status: O), and CHM211H5 (status: I). Under "Fall 2015", "Winter 2016", and "Summer 2016", no courses are listed. On the right side, a search bar contains "Course code, Prof., Full name, Key words," with a magnifying glass icon. Below it, a "Suggestions:" section lists "S- suggestion based on quiz" and "CHM311H5". A detailed course description for "Course CHM311H5" is shown, including: Credit: 0.5, Semester: Fall, LEC: 3 h/wk, BR: 2, PRA: 3 h/wk, TUT: 1 h/wk, and Professor: J. Doe. A red circle highlights the "CHM311H5" entry in the suggestions list. At the bottom right, there is a "Browse" button.

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

C Completed U Unsuccessful P In Progress I Pre-/co-requisite issue O Assessed OK

Fall 2014 Winter 2015 Summer 2015

O CHM412H5 O ANT200Y1

I CHM211H5

Fall 2015 Winter 2016 Summer 2016

Course code, Prof., Full name, Key words,

Suggestions:
S- suggestion based on quiz

CHM311H5

Course CHM311H5

Credit: 0.5 Semester: Fall
LEC: 3 h/wk BR: 2
PRA: 3 h/wk
TUT: 1 h/wk
Professor: J. Doe

f3

Clicking on a Course

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and links for 'CURRENT STATUS', 'PLANNER' (which is active), 'ACADEMIC HISTORY', 'CONTACT US', and 'HELP'. Below the navigation is a message about planning purposes and enrollment via ROSI. The main area displays a 'Plan 1' timeline with courses: Fall 2014 (CHM412H5), Winter 2015 (ANT200Y1), and Summer 2015 (CHM311H5). A modal window for 'CHM311H5 Organic Chemistry' is overlaid. The modal includes a search bar, a 'Suggestions:' section with a note about quiz-based suggestions, and a detailed course card for 'Organic Chemistry' with sections for 'Course Description', 'Course Analytics' (rating 4.5 stars), and 'Mark Distribution' (a pie chart). Navigation buttons like 'Mark Distribution', 'Grading', and 'Browse' are also visible.

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

Completed Unsuccessful In Progress Pre/co-requisite issue Assessed OK

Fall 2014 Winter 2015 Summer 2015

CHM412H5 ANT200Y1 CHM311H5

Suggestions:
S- suggestion based on quiz

CHM311H5

Organic Chemistry

Course Description:

Course Analytics

Rate: ★★★★☆

Mark Distribution

Grading Browse

Description and Analytics of the Course

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

Completed Unsuccessful In Progress Pre/co-requisite issue Assessed OK

Fall 2014 Winter 2015 Summer 2015

CHM412H5 ANT200Y1 CHM211H5

Fall 2015 Winter 2016 Summer 2016

Course code, Prof., Full name, Key words,

Suggestions:
S- suggestion based on quiz

Organic Chemistry

Course Description:

Course Analytics

Rate: ★★★★☆

Mark Distribution

Grading Browse

Dragging a Course to the Bucket

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and links for 'CURRENT STATUS', 'PLANNER' (which is selected), 'ACADEMIC HISTORY', 'CONTACT US', and 'HELP'. A user profile 'Planner - Woloszyn, Michael Dariusz' is displayed.

A message at the top states: "Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment."

The main area shows a timeline from Fall 2014 to Summer 2016. Courses listed include CHM412H5, ANT200Y1, and CHM311H5. A 'MyBucket' section contains three blue buckets, one of which has a red circle with the number '2' on it. A pink banner with the letter 'S' and the course code 'CHM311H5' is overlaid on the interface. A large red circle highlights this banner and the 'MyBucket' area. A cursor arrow points towards the 'CHM311H5' banner. A tooltip box labeled 'Suggestions:' indicates 'S- suggestion based on quiz'. Below the banner, a message says 'Two courses in " Biochem Maj " are available now.' and 'Click here to add the course to the bucket'. A blue plus sign button labeled 'Add bucket' is also visible.

At the bottom right, there are 'Browse' and 'F3' buttons.

MyBucket in Degree Explorer

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE
UAT

Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner Save Plan As | Reset All | PDF Report

C Completed U Unsuccessful P In Progress ! Pre/co-requisite issue O Assessed OK

Fall 2014 Winter 2015 Summer 2015

O CHM412H5 O ANT200Y1

! CHM311H5

Fall 2015 Winter 2016 Summer 2016

Course code, Prof., Full name, Key words,

Suggestions:
S- suggestion based on quiz

CHM311H5

F3

Different Buckets for Different Plans

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner page. The top navigation bar includes the university logo, 'UNIVERSITY OF TORONTO', 'FACULTY OF ARTS & SCIENCE', 'UAT', 'Degree Explorer', 'Logout', and links for 'CURRENT STATUS', 'PLANNER' (which is selected), and 'ACADEMIC HISTORY'. Below the navigation is a message about planning purposes and enrollment via ROSI. The main area is titled 'Planner - Woloszyn, Michael Dariusz'. It displays a timeline from Fall 2014 to Winter 2016 with courses listed: CHM412H5 (Fall 2014), ANT200Y1 (Winter 2015), CHM211H5 (Summer 2015), and CHM311H5 (Fall 2015). A 'MyBucket' section shows two blue buckets labeled '2' and 'Biochem Maj'. A red callout highlights the 'Biochem Maj' bucket. A search bar at the top right contains 'Course code, Prof., Full name, Key words,' and a magnifying glass icon. A sidebar on the right lists 'Suggestions:' with 'CHM311H5' and a note: 'Two courses in " Biochem Maj " are available now.' It also includes a link to add the course to the bucket and a large blue plus sign icon. The bottom right corner has a 'Browse' button.

Universal Bucket to Add General Courses

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE UAT | Degree Explorer

woloszyn Logout

CURRENT STATUS PLANNER ACADEMIC HISTORY CONTACT US HELP

Planner - Woloszyn, Michael Dariusz

Any courses or programs added below are for planning purposes only and are meant to assist you in making informed choices in course and program selection. Any changes to courses and programs on this website will not automatically enrol/register you, or guarantee that you are eligible to enrol. All registration is done via ROSI. Please refer to your divisional registration instructions for detailed information about enrollment.

Plan 1 +

Planner

Save Plan As | Reset All | PDF Report

Completed Unsuccessful In Progress Pre/co-requisite issue Assessed OK

Fall 2014 Winter 2015 Summer 2015

CHM412H5 ANT200Y1 MyBucket

CHM311H5 Suggestion based on quiz

Two courses in "Biochem Maj" are available now.

Click here to add the course to the bucket

Fall 2015 Winter 2016 Spring 2016

Chem-Specialist Biochem Maj Universal Add bucket

Browse

Adding a New Bucket(Alternative Way of Adding a Plan)

The screenshot shows the University of Toronto Faculty of Arts & Science Degree Explorer Planner interface. At the top, the logo and name are displayed, along with the user's name "woloszyn" and a "Logout" button. The navigation bar includes links for CURRENT STATUS, PLANNER (which is selected), ACADEMIC HISTORY, CONTACT US, and HELP.

The main content area is titled "Planner - Woloszyn, Michael Dariusz". It contains a message about planning purposes and enrollment. Below this, there's a "Plan 1" section with a "+" button. The "Planner" section shows a grid of courses across different semesters (Fall 2014, Winter 2015, Summer 2015, Fall 2015, Winter 2016) and years (2015-2016). Courses listed include CHM412H5, ANT200Y1, CHM311H5, and others. A "MyBucket" section is visible on the right side of the grid.

A large red circle highlights the "Add bucket" button, which is a blue plus sign icon located in the bottom right corner of the course grid area. A pink speech bubble with the text "S CHM311H5" points to this button. To the right of the grid, a sidebar titled "Suggestions:" lists "CHM311H5" as a suggestion based on a quiz. It also mentions "Two courses in 'Biochem Maj' are available now." and provides a link to add the course to the bucket.

At the bottom right of the page, there are "Browse" and "F3" buttons.

Regulations, Standards and Intellectual property

- Freedom of Information and Protection of Privacy Act
- Accessibilities for Ontarians with Disabilities Act
- Software Packages

Testing

Objectives to test:

- **Time** - Test by using a Fake account to see how long it takes students to choose a course
- **Information** - To test this the course course coordinators will check the information regarding their respective courses
- **Notification** - Make temporary accounts to test if the notification features on the website are working properly

Implementation Requirements

- Business analyst
- Programming and data scientist
- Staged implementation

Economics

Business Analyst:

- \$2,000

Data Scientist:

- \$110,000

Web designers and testing persons:

- \$52,500 per year

Website Maintenance:

- \$10,000 per month

Life Cycle and Environmental Impacts

Goal and Scope

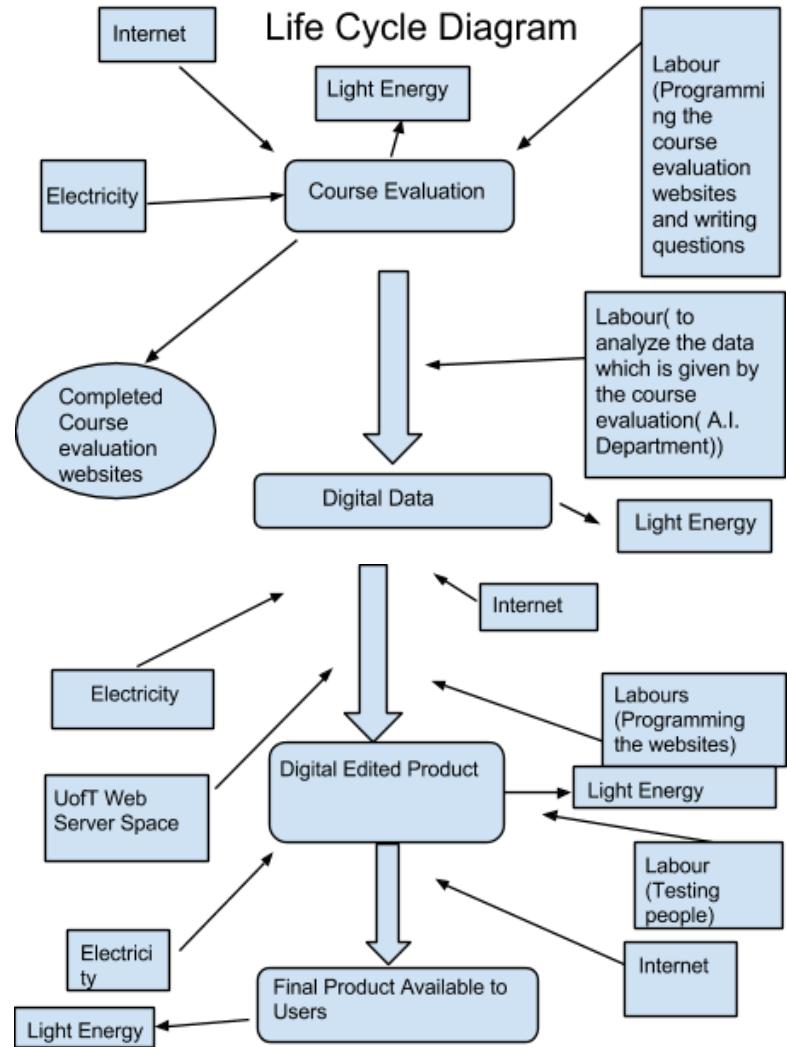
- Virtual design

Impact Assessment

- Information overload

Improvement Assessment

- Negligible



Human Factors

Physical

- Calendar is reduced to a single page view
- Course are dialogs placed under cursor

Psychological

- Relevant course information now can be found on CourseNotes
- MyBucket retains course selection

Social Impact

Departments

- The ability to distribute course information

Colleges

- Less academic counselling will be required

Registrars

- Reduces number of appointments to plan courses

Professors

- Inform students about research positions

2.6 - Conclusion

Lacking areas

- Information
- Organization
- Notification

Solution

- Increased Information
- Addition of MyBucket
- Added Notification

References

- [0] Fanpop. Candy Shop - Candy Photo (235358) [Online]. Available:
<http://www.fanpop.com/clubs/candy/images/235358/title/candy-shop-photo>
- [1] Faculty of Arts and Science, University of Toronto. (2010). A-Z Program List [Online]. Available: <http://www.artsci.utoronto.ca/newstudents/courses/programs/a-z>
- [2] Faculty of Arts and Science, University of Toronto. (2010). About A&S [Online]. Available: <http://www.artsci.utoronto.ca/main/about>
- [3] Degree Explorer. [Online]. Available:
<https://degreeexplorer-uat.easi.utoronto.ca/degreeExplorer/pages/studentRecord/planner.xhtml?cid=34>
- [4] Degree Explorer. [Online]. Available:
<https://degreeexplorer-uat.easi.utoronto.ca/degreeExplorer/pages/studentRecord/planner.xhtml?cid=34>
- [5] University of Toronto. Planner [Online]. Available: <https://degreeexplorer-uat.easi.utoronto.ca/degreeExplorer/pages/studentRecord/planner.xhtml?cid=34>