

Technical Documentation

Standard Objects Used:

- Contact (labeled as “Student”)
- Account (labeled as “School”)
- Opportunity
- Product
- Price books
- Quote
- Quote Line Items

Contact sObject Custom Fields

Matricula	Matricula__c	Auto Number
GPA	GPA__c	Number(10, 1)
State	State__c	Picklist
Scholarship Types	Scholarship_Types__c	Picklist (Multi-Select)
Total Scholarship	Total_Scholarship__c	Formula (Percent)

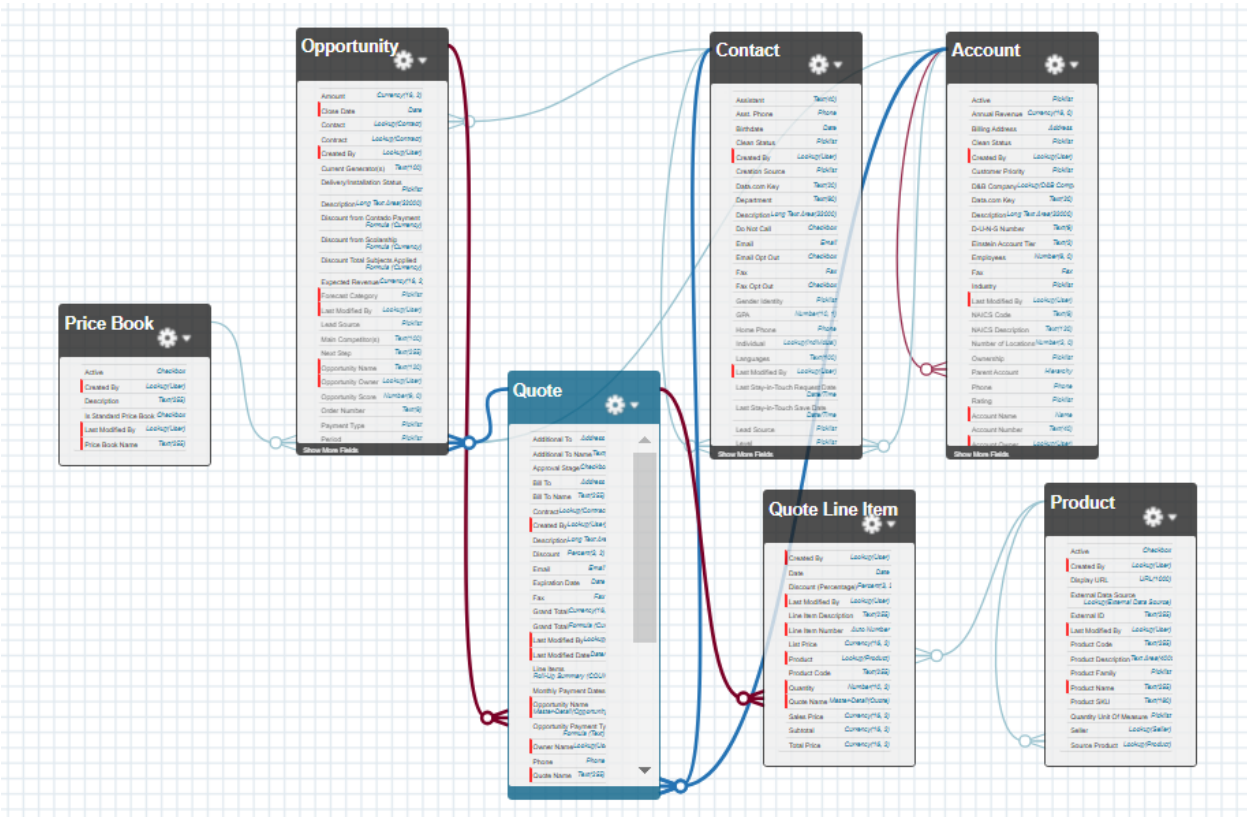
Opportunity sObject Custom Fields

Contact	Contact__c	Lookup(Student)
Period	Period__c	Picklist
Total Subjects	Total_Subjects__c	Roll-Up Summary (COUNT Opportunity Product)
Discount Total Subjects Applied	Discount_total_subjects_applied__c	Formula (Currency)
Payment Type	Payment_Type__c	Picklist
Discount from Contado Payment	Discount_from_Contado_Payment__c	Formula (Currency)
Scholarship Percentage	Scholarship_Percentage__c	Formula (Percent)
Discount from Scholarship	Discount_from_Scholarship__c	Formula (Currency)

Quote sObject Custom Fields

Approval Stage	Approval_Stage__c	Checkbox
Opportunity Payment Type	Opportunity_Payment_Type__c	Formula (Text)
Monthly Payment Dates	Monthly_Payment_Dates__c	Formula (Text)
Grand Total	Grand_Total2__c	Formula (Currency)

Relations Between Objects (Schema Builder)



Validation Rules - Contact

Validation Rules

3 Items, Sorted by Rule Name

New

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Limit_Excelence_Scholarship_From_GPA	Scholarship Types	"GPA less than 9.5 cannot include Excellence Scholarship"	✓	Eva Perez, 12/11/2024, 22:51
Limit_Total_Scholarship	Scholarship Types	"Total scholarship cannot exceed 60%"	✓	Eva Perez, 12/11/2024, 19:00
Limit_Value_GPA	GPA	"GPA can only be between 0-10"	✓	Eva Perez, 12/11/2024, 22:43

Contact Validation Rule

[Back to Contact Validation Rules](#)

Validation Rule Detail

Edit

Clone

Rule Name	Limit_Excelence_Scholarship_From_GPA	Active	<input checked="" type="checkbox"/>
Error Condition Formula	AND(GPA__c < 9.5, INCLUDES(Scholarship_Types__c , "Excelencia"))		
Error Message	"GPA less than 9.5 cannot include Excelence Scholarship"	Error Location	Scholarship Types
Description			
Created By	Eva Perez, 12/11/2024, 22:51	Modified By	Eva Perez, 12/11/2024, 22:51

Edit

Clone

Contact Validation Rule

[Back to Contact Validation Rules](#)

Validation Rule Detail

Edit

Clone

Rule Name	Limit_Total_Scholarship	Active	<input checked="" type="checkbox"/>
Error Condition Formula	Total_Scholarship__c > 0.60		
Error Message	"Total scholarship cannot exceed 60%"	Error Location	Scholarship Types
Description			
Created By	Eva Perez, 12/11/2024, 19:00	Modified By	Eva Perez, 12/11/2024, 19:00

Edit

Clone

Contact Validation Rule

[Back to Contact Validation Rules](#)

Validation Rule Detail

Edit

Clone

Rule Name	Limit_Value_GPA	Active	<input checked="" type="checkbox"/>
Error Condition Formula	GPA__c > 10.0		
Error Message	"GPA can only be between 0-10"	Error Location	GPA
Description			
Created By	Eva Perez, 12/11/2024, 22:43	Modified By	Eva Perez, 12/11/2024, 22:43

Edit

Clone

Validation Rules - Opportunity

<div>Validation Rules</div> <div>1 Items, Sorted by Rule Name</div>					<div>New</div>
RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY	
Limit_Subjects_For_Period	Top of Page	"Can only add a maximum of 4 subjects for Cuatrimestral and 7 subjects for Semestral"	<input checked="" type="checkbox"/>	Eva Perez, 12/11/2024, 22:31	<div></div>

Opportunity Validation Rule

[Back to Opportunity Validation Rules](#)

Validation Rule Detail				<div>EditClone</div>
Rule Name	Limit_Subjects_For_Period		Active	<input checked="" type="checkbox"/>
Error Condition Formula	OR(AND(ISPICKVAL(Period__c , "Semestral"), Total_Subjects__c > 7), AND(ISPICKVAL(Period__c, "Cuatrimestral"), Total_Subjects__c > 4))			
Error Message	"Can only add a maximum of 4 subjects for Cuatrimestral and 7 subjects for Semestral"		Error Location	Top of Page
Description				
Created By	Eva Perez, 12/11/2024, 22:31		Modified By	Eva Perez, 12/11/2024, 22:31
<div>EditClone</div>				

Flows Created:


2. Actions and Related Records

2 items • Sorted by Trigger Order • Record—Run After Save ⓘ

Edit Order

New Flow

1




Quote Approval•V1

Active

▼

2



Send PDF to Mail Flow•V3

Active

▼

Description of Quote Approval Flow: First an Approval Process was created in Process Automation, named it as Quote Approval and set it as active. It checks if Status of Quote is set as “Needs Review” then proceed to make the approval process. It’s not automated yet as it is only the steps for us to select “Submit for Approval” correctly.

Here are the details inside Quote Approval.

Approval Processes
Quote: Quote Approval
[« Back to Approval Process List](#)

Process Definition Detail		<div><div>Edit</div><div>Clone</div><div>Deactivate</div></div>	
Process Name	Quote Approval	Active	<input checked="" type="checkbox"/>
Unique Name	Quote_Approval	Next Automated Approver Determined By	
Description			
Entry Criteria	Quote: Status EQUALS Needs Review		
Record Editability	Administrator ONLY	Allow Submitters to Recall Approval Requests	<input type="checkbox"/>
Approval Assignment Email Template			
Initial Submitters	Opportunity Owner		
Created By	Eva Perez, 13/11/2024, 13:47		Modified By Eva Perez, 13/11/2024, 13:53

Initial Submission Actions ⓘ
Add Existing
Add New ▼

Action	Type	Description
	Record Lock	Lock the record from being edited
Edit Remove	Field Update	Approval Stage to true
Edit Remove	Field Update	Update Quote Status to in review

Approval Steps ⓘ

Action	Step Number	Name	Description	Criteria	Assigned Approver	Reject Behavior
Show Actions Edit	1	Approval Step 1			User: Eva Perez	Final Rejection

Final Approval Actions ⓘ
Add Existing
Add New ▼

Action	Type	Description
Edit	Record Lock	Lock the record from being edited
Edit Remove	Field Update	Update to Approved Status
Edit Remove	Field Update	Update Approval Stage false

Final Rejection Actions ⓘ
Add Existing
Add New ▼

Action	Type	Description
Edit	Record Lock	Unlock the record for editing
Edit Remove	Field Update	Update Approval Status to Rejected
Edit Remove	Field Update	Update Approval Stage to false

Recall Actions ⓘ
Add Existing
Add New ▼

Action	Type	Description
	Record Lock	Unlock the record for editing

Then we proceed to make a new Record-Triggered Flow in Flow section.


We set the entry conditions in Quote Standard Object:

Condition Requirements
All Conditions Are Met (AND) ▼


Field
Status
Operator
Equals ▼
Value
Needs Review

AND
Field
Status
Operator
Is Changed ▼
Value
True X



Include an Action “Submit for Approval” with the Approval Process created previously and the Quote Id.

 **Submit for Approval**

* Label

* API Name 


Description


Submit for Approval 


submit-submit


Use values from earlier in the flow to set the inputs for the "Submit for Approval" core action. To use its outputs later in the flow, store them in variables.


Set Input Values for the Selected Action

A_a * Record ID 

A_a Triggering Quote > Quote ID X

A_a Approval Process Name Or ID 





Included

Save, name the flow and set it as Active.

Description of Send PDF to Email Flow: First an Apex Class named "QuoteEmailHandler" was created in Developer Console and added the @InvocableMethod for us to be able to call and use it inside the flow builder.

```
force-app > main > default > classes > QuoteEmailHandler.cls > sendQuotePDFToContact(List<Id>) : void
1 public class QuoteEmailHandler {
2     @InvocableMethod
3     public static void sendQuotePDFToContact(List<Id> quoteIds) {
4         List<Messaging.EmailFileAttachment> attachments = new List<Messaging.EmailFileAttachment>();
5     }
```

In the body of this class:

- Query the Quote object to get the Opportunity Id
- Find the ContentDocument ID linked to the Quote
- Use the ContentDocumentId to retrieve the latest ContentVersion (the actual PDF)
- Query the Opportunity to get the associated Contact's email
- Ensure the associated Contact's email exists
- Get the first ContentVersion (PDF file)
- Create an email attachment
- Create and send the email


If used code review is needed, these are just the comments from it, feel free to find it in the code repository under **force-app\main\default > classes > QuoteEmailHandler.cls**

Then we proceed to make a new Record-Triggered Flow in Flow section.


We set the entry conditions in Quote Standard Object:

Condition Requirements

All Conditions Are Met (AND) ▼

Field	Operator	Value	
Status	Equals ▼	Accepted	

Include an Action “apex-QuoteEmailHandler” created previously and the Quote Id.

 QuoteEmailHandler ×


* Label

Send PDF to Email

* API Name ⓘ

Send_PDF_to_Email

Description


 **QuoteEmailHandler**
apex-QuoteEmailHandler

Use values from earlier in the flow to set the inputs for the “QuoteEmailHandler” Apex action. To use its outputs later in the flow, store them in variables.

Set Input Values for the Selected Action

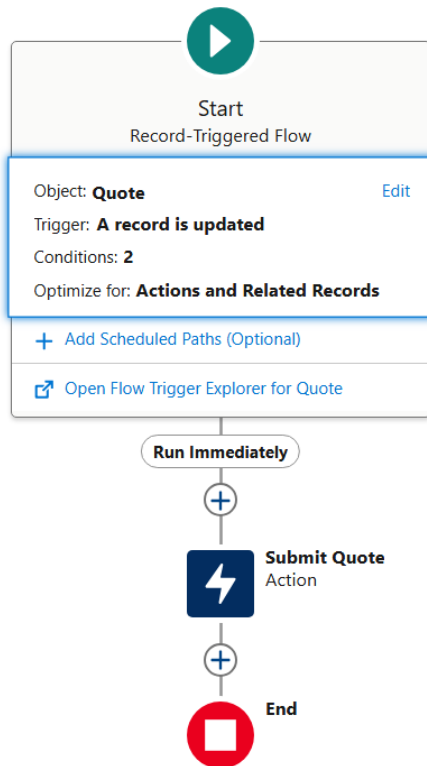
^A_a quotelds ⓘ

^A_a Triggering Quote > Quote ID ✕

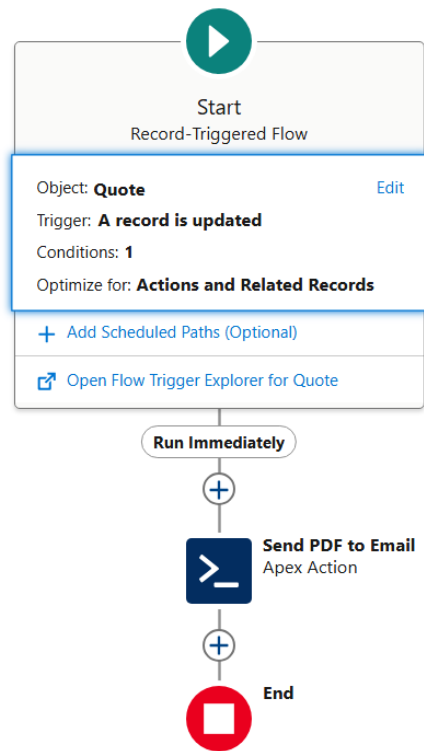

included

Save, name the flow and set it as Active.

Quote Approval Flow



Send PDF to Email Flow



Limitations:

- In the Quote Approval Flow the default Approval User is set to my own user.
- PDF must be created already in order for the Email to be sent in “Accepted” Status Quote.

Images

New Student Interface

New Student

* = Required Information

Student Information

* Name

Salutation

--None--

Birthdate

First Name

First Name

* Last Name

Last Name

School Name

Search Schools...

Phone

Matricula

Email

GPA

State

--None--

Additional Information

Scholarship Types

Available

Excelencia

Deportiva

Familiares Docentes

Económica

Chosen

Cancel

Save & New

Save

* = Required Information

Student Information

* Name	Birthdate
Salutation --None--	24/09/1994
First Name Stiles	
* Last Name Stilinski	
School Name Beacon Hills	Phone 6145879809
Matricula	Email evalps24@gmail.com
GPA 9.8	State Jalisco

Scholarship Types

Available

Económica

Chosen

Excelencia
Deportiva
Familiares Docentes

Example on How Total Cost With Discounts Work

1. In Contact information, we take the Scholarship Types and with a formula calculate the total percentage.

Total Scholarship

50.00%

This field is calculated upon save

Scholarship Types

Available

Económica

Chosen

Excelencia
Deportiva
Familiares Docentes

2. Once the Student information is complete, we create an opportunity.


Related	Details
Name	Stiles Stilinski
Birthdate	24/09/1994
School Name	Beacon Hills
Phone	6145879809
Matricula	EST-24004
Email	evalps24@gmail.com
GPA	9.8
State	Jalisco
Total Scholarship	50.00%
Scholarship Types	Excelencia;Deportiva;Familiares Docentes

New Opportunity

* = Required Information

Opportunity Information

Opportunity Owner

 Eva Perez

Private

☐


* Opportunity Name

Stiles Opportunity

Contact

Search Students...

School Name

 Beacon Hills

Type

--None--

Amount

* Close Date

14/11/2024

Next Step

* Stage

Prospecting

Probability (%)

10%

Cancel

Save & New

Save

Type ↻

New Customer ▼

Period ↻

--None-- ▼

✓ --None--

Semestral

Cuatrimestral

Cancel Save & New Save

3. We need to know which period is the student in (Semestral or Cuatrimestral), if “Semestral” is chosen, no more than 7 subjects can be added as products. If “Cuatrimestral” is added no more than 4 subjects can be added.
- a. Here we added for Stiles, “Semestral” Period as well as “Contado” Payment Type

Type ↻

New Customer ▼


Period ↻


Semestral ▼

Payment Type ↻

Contado ▼

Cancel Save & New Save


Opportunity
Stiles Opportunity

Opportunity Owner	Amount
 Eva Perez	
Private	Expected Revenue
<input type="checkbox"/>	
Opportunity Name	Close Date
Stiles Opportunity	14/11/2024
Contact	Next Step
School Name	Stage
Beacon Hills	Prospecting
Type	Probability (%)
New Customer	10%
Period	Scholarship Percentage
Semestral	0%
Total Subjects	Discount from Scholarship
0	
Discount Total Subjects Applied	
Payment Type	
Contado	
Discount from Contado Payment	

- Then we proceed to save and add the Products (Subjects) from a Price Book, Stiles is from Jalisco, so we choose “Jalisco Price Book”. And add the products respectively (we can choose up to 7 with “Semestral” period).

Choose Price Book

Select a Price Book to associate with this opportunity. You can add products only from the Price Book you associate with this opportunity. Changing the Price Book deletes all products from the opportunity.

Price Book



 Jalisco Price Book
  Guanajuato Price Book
  Nuevo Leon Price Book
  Queretaro Price Book

Add Products

Price Book: Jalisco Price Book

Show Selected (0)

<input type="checkbox"/>	Product Name	Product Code	List Price	Prod
<input type="checkbox"/>	Arts (艺术)		\$13,000.00	
<input type="checkbox"/>	Basic Programming		\$13,000.00	
<input type="checkbox"/>	Chemistry		\$13,000.00	
<input type="checkbox"/>	Chinese (汉语)		\$13,000.00	
<input type="checkbox"/>	English (英语)		\$13,000.00	
<input type="checkbox"/>	History (历史)		\$13,000.00	
<input type="checkbox"/>	Mathematics (数学)		\$13,000.00	

We end up choosing 4 subjects.

Edit Selected Products

	*Product	*Quantity	*Sales Price	Date
1	Arts (艺术)	1.00	\$13,000.00	
2	Basic Programming	1.00	\$13,000.00	
3	Chemistry	1.00	\$13,000.00	
4	Chinese (汉语)	1.00	\$13,000.00	

- As products are saved, Opportunity Object is updated with the new cost output.



Opportunity Stiles Opportunity

Opportunity Owner	Eva Perez	Amount	\$52,000.00
Private	<input type="checkbox"/>	Expected Revenue	\$5,200.00
Opportunity Name	Stiles Opportunity	Close Date	14/11/2024
Contact	Stiles Stilinski	Next Step	
School Name	Beacon Hills	Stage	Prospecting
Type	New Customer	Probability (%)	10%
Period	Semestral	Scholarship Percentage	50%
Total Subjects	4	Discount from Scholarship	\$21,921.25
Discount Total Subjects Applied	\$46,150.00		
Payment Type	Contado		
Discount from Contado Payment	\$43,842.50		

6. We have formula to calculate the amount of subjects and discount respectively.
- One subject added, no discount.
 - Two subjects added, second one has a discount of 10%, first one stays at normal price.
 - Three subjects added or more, first one normal price and others have a discount of 15%.

Discount Total Subjects Applied (Currency) =

```
IF (
  Total_Subjects__c = 1,
  Amount,
  IF (
    Total_Subjects__c = 2,
    Amount - (0.10 * (Amount / Total_Subjects__c)),
    Amount - (0.15 * (Amount - (Amount / Total_Subjects__c)))
  )
)
```

7. Then we proceed to check if payment was selected as “Mensualidad” or “Contado”. The “Contado” payment has a discount of 5% of the total price of the subjects. If not selected, just stays the same price.

```
Discount from Contado Payment (Currency) =  
IF (ISPICKVAL (Payment_Type__c, "Contado")  
    ,  
    Discount_total_subjects_applied__c * 0.95,  
    Discount_total_subjects_applied__c  
)
```


8. Finally, we check on the Scholarship Types added and its percentage with a lookup relationship from Contact.

```
Discount from Scholarship (Currency) =  
IF ( ISPICKVAL ( Payment_Type__c , "Contado"), Discount_from_Contado_Payment__c * (1 - ( Scholarship_Percentage__c ))  
    ,Discount_total_subjects_applied__c * (1 - (Scholarship_Percentage__c ))  
    )
```


9. Our total payment would be after discounting the Scholarship, under the name of “Discount from Scholarship”

Generated Quotes

To see the automation of the generated PDF Quote to the email provided by the Contact is necessary to have created and approved the Quote.

 Quote
Stiles Quote

Related	Details
Quote Number	Expiration Date
00000007	
Quote Name	Syncing
Stiles Quote	<input type="checkbox"/>
Opportunity Name	Status
Stiles Opportunity	Draft
School Name	Description
Beacon Hills	
Opportunity Payment Type	
Contado	
Monthly Payment Dates	
Pago único: 10 de julio	
Approval Stage	
<input type="checkbox"/>	
Grand Total	
\$21,921.25	



Eva Perez is requesting approval for quote

Quote Name: Stiles Quote • Owner Name: Eva Perez

a minute ago

Approval Request

Quote Approval

Pending

Approve

Reject

Reassign

Submitter

Eva Perez

Date Submitted

13 Nov 2024

Actual Approver

Eva Perez

Assigned To

Eva Perez

Details

Approval Details

Quote Name

Stiles Quote

Owner Name

Eva Perez

No Comments

Once on “Accepted” Status an email will be sent to the contact. (Only if PDF Quote was previously created)

Quote

Stiles Quote

Status changed successfully.

New Student

New Opportunity

New Case

Quote Number

00000007

Expiration Date

Syncing

Opportunity Name

Stiles Opportunity

School Name

Beacon Hills

Grand Total

\$52,000.00

Accepted

Denied

Mark Status as Complete

Related

Details

Quote Line Items (4)

Add Products

Edit Products

Product	Sales Price	Quantity	Subtotal
Arts (艺术)	\$13,000.00	1.00	\$13,000.00
Basic Programming	\$13,000.00	1.00	\$13,000.00
Chemistry	\$13,000.00	1.00	\$13,000.00
Chinese (汉语)	\$13,000.00	1.00	\$13,000.00

View All

Activity

Filters: All time • All activities • All types

Refresh

Expand All

View All

Upcoming & Overdue

No activities to show.

Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

Your Quote Document ➤ Recibidos x



Eva Perez a través de g2sv3eut3x7srzes.tzzhe96.bm-clh3leav.usa876.bnc.salesforce.com
para mí ▼



Traducir al español



This is your Quote document attached! Have a nice day!

Un archivo adjunto • Analizado por Gmail ⓘ



Received, thank you.

Please go ahead with the order.

Thank you!

And for the actual PDF Quote attached to this email:

Quote for students

Created By Eva Perez

Company Address MX

Created Date 13/11/2024

Quote Number 00000007

School Name Beacon Hills

Phone 6145879809

Name Stiles Stilinski

Email evalps24@gmail.com

Matricula EST-24004

GPA 9.8

State Jalisco

Scholarship Types Excelencia; Deportiva; Familiares Docentes

Birthdate 24/09/1994

Total Scholarship 50.00 %

Product	List Price	Quantity	Total Price
Arts (艺术)	\$13,000.00	1.00	\$13,000.00
Basic Programming	\$13,000.00	1.00	\$13,000.00
Chemistry	\$13,000.00	1.00	\$13,000.00
Chinese (汉语)	\$13,000.00	1.00	\$13,000.00

Monthly Payment Pago único: 10 de julio
Dates

Subtotal \$52,000.00

Scholarship 50 %

Total Subjects 4

Percentage

Discount Total \$46,150.00

Discount from \$21,921.25

Subjects Applied

Scholarship

Payment Type Contado

Grand Total \$21,921.25

Discount from \$43,842.50

Contado Payment