HOW TO PREPARE A BUDGET

by Simon Moss

## Introduction

When you complete your application, as well as when you complete your confirmation of candidature, you will need to prepare a budget. A budget is an estimate of the expenses your research project is likely to incur. This document

* presents some guidelines on how to prepare these budgets
* indicates how to request funding to purchase relevant goods and services

**Why do you need to estimate the expenses accurately?**

After you submit a budget, your college—or school, if you are enrolled in Menzies—will decide whether they can afford these expenses. If they accept your application, or approve your confirmation of candidature, the college, in essence, has pledged to pay these expenses. The following table outlines the problems that might unfold if you significantly underestimate or overestimate your budget.

|  |  |
| --- | --- |
| Problem | Consequence |
| Underestimated budget | * The college may not be able to fund the additional expenses you need, compromising your project |
| Overestimated budget | * The college may not accept your application or confirmation, because the budget is too steep |

## A typical budget

The following table illustrates a typical budget. As this table shows, the budget should include

* all the items you might need to purchase—including equipment, consumables, stationery, software, travel, conferences, courses, research assistants, and incentives
* the approximate cost of these items
* the approximate date in which you might need to purchase these items
* some additional notes or justifications

The date is vital because you can spend only up to a certain amount each semester.

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Cost | Approximate  data of purchase | Notes |
| **Equipment** |  |  |  |
| Olympus voice recorder | $110.00 | June 2020 |  |
| **Consumables** |  |  |  |
| Methanol 2.5 L | $12.00 | Sept 2021 |  |
| Formic acid | $19.00 | Sept 2021 |  |
| **Stationary** |  |  |  |
| Stationary supplies | $80.00 | Oct 2022 | Pens and paper to facilitate the focus groups |
| **Software** |  |  |  |
| Student licence for STATA | $140.00 | August 2020 | The scripts were written in Stata |
| **Travel and conferences** |  |  |  |
| Flights to two locations | $1400.00 | February 2022 | Most likely Qantas |
| Taxi | $300.00 | February 2022 | About 200 km |
| Accommodation for 5 nights | $600.00 | February 2022 |  |
| Living expenses during travel | $100.00 | February 2022 | For meals |
| Conference registration | $400.00 | February 2022 |  |
| **Courses** |  |  |  |
| Safety training course | $250.00 | November 2020 | Needed to complete the laboratory work |
| **Research assistants** |  |  |  |
| Transcription service | $500 | September 2022 |  |
| **Other** |  |  |  |
| Incentives to pay participants | $400.00 | June 2021 | For 400 surveys  Typical rate for this website is $1 per 15 minutes |
| Approximate budget for each semester |  |  |  |
| Semester 1: Jan to June 2020 | $110 |  |  |
| Semester 2: July to Dec 2020 | $390 |  |  |
| Semester 1: Janto June 2021 | $400 |  |  |
| Semester 2: July to Dec 2021 | $31 |  |  |
| Semester 1: Jan to June 2022 | $2900 |  |  |
| Semester 2: July to Dec 2022 | $480 |  |  |
| **Total** | **$4311** |  |  |

## How to construct this budget

**Identify the items you might need**

To identify the items you might need, you could

* use the previous illustration to help you plan your research activities as carefully as possible
* seek advice or precedents from your supervisor or other candidates in your field

**Estimate the costs of these items**

To estimate these expenses—such as the costs of equipment, stationary, and travel—you should visit the website, and scan the catalogue, of relevant suppliers. The following table presents some of these suppliers.

|  |  |
| --- | --- |
| Item | Supplier and website |
| Equipment: Electronic | * JB hi fi: <https://www.jbhifi.com.au/features/current-catalogues/> |
| Equipment: Laboratory | * Interpath services: tinyurl.com/yymqlkcb * Thermofisher: tinyurl.com/yxms3fb2 |
| Consumables: Laboratory | * Interpath services: tinyurl.com/yymqlkcb * Thermofisher: tinyurl.com/yxms3fb2 |
| Stationary | * Officeworks: <http://catalogues.officeworks.com.au> |
| Software | * Visit the specific supplier, such as IBM |
| Travel | * Expedia, webjet, [www.travelmath.com](http://www.travelmath.com), or skyscanner.com.au |
| Accommodation | * Wotif or Tripadvisor |
| Payment of participants | * Usually about $5 per hour |

Suppliers might specify the costs in other currencies. To convert to Australian dollars, visit www.xe.com/currencyconverter/

**Estimate the living expenses of travel**

If you plan to travel, you need to estimate not only the costs of transport and accommodation but also the costs of living expenses, sometimes called a travel allowance. These living expenses include

* food and drink
* other incidentals, such as perhaps the cost of internet access or even showers in some nations

The following table stipulates the costs of breakfast, lunch, dinner, and incidentals that CDU or Menzies will typically repay if you travelled in Australia—consistent with the ATO Tax Determination 2018/11. Incidentals are repaid only if you stay overnight.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nation | Breakfast | Lunch | Dinner | Incidentals |
| Australia | $21.86 | $21.86 | $34.97 | $8.74 |

These costs may be lower or higher in other nations. The following table presents the cost that CDU or Menzies will typically repay if you travelled outside Australia. To illustrate

* suppose you plan to eat breakfast and lunch in Albania
* according to Appendix B in the last two pages of this document, Albania corresponds to Country Group 2
* therefore, the estimated costs would be $18.27 + $18.27

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nation | Breakfast | Lunch | Dinner | Incidentals |
| Country Group 1 | $12.55 | $12.55 | $20.07 | $5.02 |
| Country Group 2 | $18.27 | $18.27 | $29.23 | $7.31 |
| Country Group 3 | $25.09 | $25.09 | $40.15 | $10.03 |
| Country Group 4 | $29.67 | $29.67 | $47.48 | $11.87 |
| Country Group 5 | $39.94 | $39.94 | $60.94 | $15.98 |
| Country Group 6 | $49.06 | $49.06 | $78.48 | $19.62 |

Unfortunately, these figures were accurate in 2018. Since this time, inflation has increased these prices. To estimate the prices in the year you travel

* first calculate the costs in 2018, such as $400
* calculate the number of years since 2018, such as 5
* utilise the following formula to adjust the cost



## What is maximum budget that can be allocated to my project?

So, what is the maximum budget that colleges will allocate to each candidate? The answer primarily depends on whether the field is regarded as high cost or low cost.

**Which fields are high cost?**

The following table specifies which fields tend to be designated as high cost. All other fields tend to be designated as low cost. In general, engineering, natural sciences, physical sciences, and health sciences tend to be regarded as high cost.

|  |  |
| --- | --- |
| High cost fields | |
| Physics and Astronomy | Computer Engineering |
| Chemical Sciences | Communications Technologies |
| Earth Sciences | Aerospace Engineering |
| Biological Sciences | Aircraft Maintenance Engineering |
| Other Natural and Physical Sciences | Maritime Engineering |
| Manufacturing Engineering | Environmental Engineering |
| Process and Resources Engineering | Biomedical Engineering |
| Automotive Engineering | Agriculture, Environmental and Related Studies |
| Mechanical Engineering | Medical Studies |
| Industrial Engineering | Pharmacy |
| Civil Engineering | Dentistry |
| Geomatic Engineering | Veterinary Studies |
| Electrical and Electronic Engineering and Technology | Human Movement |
| Electrical Engineering | Psychology |
| Electronic Engineering |  |

**Budget allocated to high cost and low cost projects**

Roughly speaking, colleges will tend to allot

* $1800 per semester for high-cost projects—but half if you are part time
* $800 per semester for low-cost projects—but half if you are part time

These amounts will accrue over time. For example, if you do not spend funds in your first year and your project is high in cost, your account will include $1800 after the first semester and $3600 after the second semester. However

* these figures are only approximate; colleges can adjust these limits to accommodate a range of considerations
* candidates may be able to seek additional funds for specific purposes, such as the costs of publication, conferences, courses, or unforeseen expenses
* for PhD candidates, most Colleges do not provide additional funding after the first three years full time
* to understand how colleges reach this decision, see Appendix A in this document

## How to request funding

**Requests to seek funding**

Whenever you want to purchase goods or services that are relevant to your research project, you should email the relevant administrator in your college—the administrator who you usually contact. If uncertain, you can contact [research.degrees@cdu.edu.au](mailto:research.degrees@cdu.edu.au) to request the email address of this person. In this email, you should include

* the cost of this purchase
* a brief justification of how this purchase is relevant to your project
* a budget that outlines the goods and services you plan to purchase in the future

|  |  |  |
| --- | --- | --- |
| Dear Frank  I would like to purchase a software license to use Trends. The cost is $500 a year—but I will need this licence to last two years. This software is the least expensive product I have found that can be applied to combine Bayesian analysis with colourful graphs—and I will need to complete these analyses in my final paper. This paper is likely to be published in Journal of Applied Psychology, a Q1 journal. Below is my proposed budget  Cheers  Freda | | |
| Item | Cost | Approximate  data of purchase | |
| **Equipment** |  |  | |
| Olympus voice recorder | $110.00 | June 2020 | |
| **Consumables** |  |  | |
| Methanol 2.5 L | $140.00 | Sept 2021 | |
| Formic acid | $12.00 | Sept 2021 | |
| **Stationary** |  |  | |
| Stationary supplies | $80.00 | Oct 2022 | |
| **Software** |  |  | |
| Student licence for Tends | $1000.00 | August 2020 | |
| Total | $1250.00 |  | |

**Approval from your principal supervisor**

If purchases exceed $100, you will also need to seek approval from your principal supervisor or delegate. For example, you could send our supervisor an email that resembles the following message—and then forward the response of your supervisor to your college when you seek funding.

|  |
| --- |
| Dear Susan  I am just about to request funding to support the Trend software licence. The expense will be $1000 over two years. Do you approve this request?  Cheers  Freda |

**Responses to requests**

If the available funds in your account exceed the cost of this purchase, the college will approve your request. If the available funds in your account does not exceed the cost of this purchase, members of your college will need to convene to evaluate your request. The college is more likely to approve your request if you fulfill some of the following criteria:

* you are likely to accumulate the necessary funds in future semesters
* the purchase is essential to your safety or to your progress
* you have completed the minimum training and development goals that either ORI or the college have set
* you have thus far progressed satisfactorily
* you could not have predicted or prevented the need to purchase these goods and services at this time
* your research is likely to enhance the research productivity of this university

For more information on how the college reaches these decisions, read Appendix A.

Appendix A: Criteria to evaluate funding requests from research candidates

## Introduction

Each candidate is granted an allowance, from the RTP budget, to purchase goods or services that could benefit their project. Occasionally, however, candidates want to purchase goods or services that exceed their allowance. This document proposes a method that Colleges could utilize, at least in principle, to guide these decisions and to unify practices across the university.

## Step 1: Calculate the relevant metrics

To determine whether to approve a funding request, first enter and calculate the relevant metrics. Although colleges tend to calculate these metrics routinely, this section labels these metrics to facilitate subsequent discussion. The first set of metrics need to be entered or derived from enrolment data.

|  |  |
| --- | --- |
| Metric | Definition |
| 1 Semester allowance | * $1800 if the candidate is full time and high cost * $900 if the candidate is part time and high cost * $800 if the candidate is full time and low cost * $400 if the candidate is part time and low cost   Projects are deemed as high cost if the field of education corresponds to   * physical sciences or natural sciences—including chemistry and environment * engineering * medical studies, pharmacy, dentistry, human movement, veterinary studies, or psychology |
| 2 Maximum number of semesters during candidature | * 6 if the candidate is full time and enrolled in a PhD * 4 if the candidate is full time and enrolled in a Masters by Research * 12 if the candidate is part time and enrolled in a PhD * 8 if the candidate is part time and enrolled in a Masters by Research |
| 3 Number of semesters in which the candidate has already enrolled | * Derived from Calista |
| 4 Allowance the candidate has already consumed | * Entered manually |
| 5 Annual RTP allotment to the college |  |
| 6 Number of months before the next allotment of RTP to the college |  |

The second set of metrics can be derived from the first set of metrics.

|  |  |
| --- | --- |
| Metric | Definition |
| 7 Actual distribution of allowance | * Allowance that has been distributed to the candidate already * Metric 1 x Metric 3 |
| 8 Potential distribution of allowance | * Allowance that will be distributed to the candidate by the end of his or her candidature * Metric 1 x Metric 2 |
| 9 Actual unconsumed allowance | * Allowance the candidate has accumulated but not consumed * Metric 7 – Metric 4 |
| 10 Potential unconsumed allowance | * Potential distribution of allowance that has not been consumed * Metric 8 – Metric 4 |
| 11 RTP consumed this year | * Metric 4 summed across all candidates |
| 12 Monthly RTP allotment to the college | * Metric 5 / 12 |
| 13 Monthly RTP available until the next allotment | * (Metric 5 – Metric 11) / Metric 6 |

## Step 2: Process funding requests

**Permissible RTP**

To seek funding, the university encourages candidates to email the college administrator. This email must specify

* the cost of this purchase
* a brief justification of how this purchase is relevant to the project
* a budget that outlines the goods and services the candidate plans to purchase in the future

If the email does not include this information, colleges may prompt candidates to address this shortfall. Otherwise, in response to these requests, the college should first ascertain whether RTP can be utilised to fund this purchase. The following table outlines the goods and services that candidates can and cannot purchase with RTP.

|  |  |
| --- | --- |
| Suitable use of RTP | Unsuitable use of RTP |
| Equipment or consumables that are necessary to complete the project | Resources or events, such as courses, that are not relevant to the project |
| Software or apps that are necessary to complete the project | Living expenses—such as food and rent |
| Travel and accommodation that is necessary to complete the project |  |
| Events in which candidates acquire capabilities that are relevant to their project |  |
| Events in which candidates communicate information about project |  |
| Research assistance—such as transcription services—that are necessary to complete the project |  |
| Resources to collect data, such as payments to recruit participants |  |
| External supervisors—but only when this person would not otherwise benefit from this arrangement and no academic at CDU has developed the requisite capabilities |  |

**Supervisor approval**

Next, if the purchase is sizeable, the college should ascertain whether the supervisor approves this request, primarily to assess whether the purchase is necessary to the project. If the purchase is modest, this approval might be unnecessarily bureaucratic. Therefore

* ascertain whether the request exceeds $100
* if the request exceeds $100, seek the approval of principal supervisors

A chain of emails, in which the supervisor explicitly or tacitly approved this purchase, could be deemed as approval. Alternatively, to seek approval, the college might forward the email they received from the candidate to the principal supervisor.

**Immediate response**

Next, the college should respond within 24 hours to the candidate.

* If the actual unconsumed allowance, Metric 9, exceeds the requested amount, inform the candidate the purchase has been approved
* Otherwise, inform the candidate the purchase exceeds the allowance they have yet to consume—but the college will decide in the next week whether to offer an exception

## Step 3: Decisions if the requested amount exceeds the actual unconsumed allowance

In many circumstances, candidates will request purchases that exceed their actual unconsumed allowance but not their potential unconsumed allowance. That is, at this time, they may have not accumulated a sufficient allowance to purchase the requested item. However, over their candidature, they will accumulate a sufficient allowance to purchase the requested item. The following table outlines the benefits and drawbacks of approving these requests.

|  |  |
| --- | --- |
| Benefits of approval | Drawbacks of approval |
| The candidates may need to purchase more goods and services earlier, rather than later, in their candidature | The candidates may expend significant RTP now but never complete their thesis |
| Approvals demonstrate goodwill—and the risks of these approvals are limited because the funding is modest | The candidates may underestimate the goods and services they need to purchase later—and have consumed all their allowance prematurely |

Sometimes, candidates might even request purchases that exceed their potential unconsumed allowance. When colleges are granted excess RTP, they might, at times, approve these requests as well. That is, in many circumstances, these funds might significantly increase the frequency and quality of research outputs. To ascertain whether to approve funding requests, colleges should utilise the following table. Specifically, the college should

* ascertain which of these conditions have been fulfilled
* sum the number of points that correspond to the fulfilled conditions
* if the potential unconsumed allowance, Metric 10, exceeds the requested amount, approve requests when the number of points exceeds 2
* however, if the requested amount exceeds the potential unconsumed allowance, approve requests when the number of points exceeds 3

|  |  |
| --- | --- |
| Condition | Points |
| If this purchase is not approved now, the safety of the candidate may be jeopardised | 4 |
| If this purchase is not approved now, progress will be delayed at least 4 weeks | 2 |
| If this purchase is not approved now, progress will be delayed 2 to 4 weeks | 1 |
| If the college or ORI has imposed minimum training and development goals, the candidate has fulfilled these goals | 1 |
| The principal supervisor agreed or strongly agreed this candidate has progressed satisfactorily | 1 |
| When designing the project, the candidate could not have predicted or prevented the need to purchase these goods and services at this time | 1 |
| If this purchase is not approved now, the research productivity of this university, such as the number of Q1 publications, is likely to be compromised | 1 |

Colleges, however, could adjust these criteria over time. To illustrate, suppose Metric 13 is significantly less than Metric 12:

* this finding indicates the colleges are consuming RTP at a faster rate than planned
* in this circumstance, the second criterion could be increased from 3 to 4 or higher

Conversely, suppose Metric 13 significantly exceeds Metric 12:

* this finding indicates the colleges are consuming RTP at a slower rate than planned
* in this circumstance, the second criterion could be decreased from 3 to 2

## Step 4: Responses to accumulated RTP

If Metric 13 significantly exceeds Metric 12—and hence the colleges are consuming RTP at a slower rate than planned—they might introduce a range of initiatives to expend RTP. For example, colleges might implement this sequence of activities

* divide the amount of unspent RTP—that is, Metric 5 minus Metric 11—by the number of candidates in the college; this value represents the amount of unspent RTP per candidate
* for each academic, multiply the number of candidates in which each supervisor is a principal by the unspent RTP per candidate; this value represents the amount each principal supervisor should expend to support their candidates this year
* prompt these principal supervisors to consider how they might expend this RTP

The benefit of this approach is that supervisors might be able to uncover goods or services that could assist multiple candidates.

Appendix B: Country Groups to calculate travel allowance overseas

Table

Description automatically generated

Table

Description automatically generated