Course Guide
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**Fred Hay** – Engineer Class 1

**Gary Wilson** – Master Class 1

**Graham Haultain** - Master Class 1

**Andre Bezkarovainy** – Master Class 1

**Keefo Zechariah-Watters** - Master Class 3, MED 1

Student co-ordinator

**Maree Nash**

Student Support

**Susan Ashe (Sashe)**

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**OLS Website**  Login from www.oten.edu.au

**Post** OTEN Maritime Studies

51 Wentworth Rd

Strathfield NSW 2135

**OTEN Web**  www.oten.edu.au

**Maritime website**  www.oten.edu.au/oten/maritime

**DET Student Portal**  Login from www.oten.edu.au

Join us on:

[www.youtube.com/OTENMaritimeStudies](http://www.youtube.com/OTENMaritimeStudies)

[www.facebook.com/OTEN.Marine](http://www.facebook.com/OTEN.Marine)
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Maritime Studies team</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to your OTEN studies</td>
<td>7</td>
</tr>
<tr>
<td>Your Course</td>
<td>8</td>
</tr>
<tr>
<td>Units of Competency</td>
<td>10</td>
</tr>
<tr>
<td>‘Recognition’ for Unit of Competency</td>
<td>11</td>
</tr>
<tr>
<td>Your enrolment</td>
<td>11</td>
</tr>
<tr>
<td>Your learning materials</td>
<td>13</td>
</tr>
<tr>
<td>Maritime Learning Resources (MLRs)</td>
<td>13</td>
</tr>
<tr>
<td>Pathway through your resources</td>
<td>13</td>
</tr>
<tr>
<td>Assessment Guide</td>
<td>13</td>
</tr>
<tr>
<td>Supplementary Notes</td>
<td>14</td>
</tr>
<tr>
<td>Other resources</td>
<td>14</td>
</tr>
<tr>
<td>Your assessment</td>
<td>23</td>
</tr>
<tr>
<td>Course Grading</td>
<td>23</td>
</tr>
<tr>
<td>Unit assessments</td>
<td>23</td>
</tr>
<tr>
<td>Assignments</td>
<td>24</td>
</tr>
<tr>
<td>Tests (Exams)</td>
<td>25</td>
</tr>
<tr>
<td>Result Slips</td>
<td>25</td>
</tr>
<tr>
<td>Student barcode labels</td>
<td>25</td>
</tr>
<tr>
<td>Studying through OTEN</td>
<td>26</td>
</tr>
<tr>
<td>The OTEN Learning Support site</td>
<td>26</td>
</tr>
<tr>
<td>Email</td>
<td>26</td>
</tr>
<tr>
<td>DET Student Portal</td>
<td>27</td>
</tr>
<tr>
<td>Student E Services (SES) website</td>
<td>27</td>
</tr>
<tr>
<td>Block classes</td>
<td>27</td>
</tr>
<tr>
<td>Online classes</td>
<td>27</td>
</tr>
<tr>
<td>Your progress</td>
<td>29</td>
</tr>
<tr>
<td>Motivation &amp; planning</td>
<td>30</td>
</tr>
</tbody>
</table>
Introduction to your teacher 33

Location Maps 37
   Block Classes, OTEN 39
   Block Classes - Sydney Institute Technology 41

Accommodation 43

Assessment Guide 45
   OTAB (OTEN Task and Assignment Book) 45
   Assignments 46
   Attendance at Block Classes 47
   Tests / Written Exams 47
   Simulator Assessments 47
   Assessment by unit 48

Suggested pathway through your learning resources 57
   Important Note – AMSA Marine Orders 57
   Prior to attending BLOCK A 57
   Prior to attending BLOCK B 64
   Prior to attending BLOCK C 69
Introduction to your OTEN studies

Welcome to the Diploma of Transport and Distribution Maritime Operations – Deck Watchkeeper / Master <500GT.

This Course Guide will provide you with information about your course requirements and how you can make the most of your studies at OTEN. You will also find the Assessment Guide and Suggested pathway through your learning resources towards the end of this guide.

Study this guide thoroughly.

Keep this guide handy as it provides an overview of your course and explains what you need to study before completing your assignments. This guide also explains all assessments for all units.

After enrolment you will also be able to access the OLS (Online Learning Support) site which will help you to track your studies, provide additional resources and provide you with any course updates. You can login to the OLS from the OTEN home page www.oten.edu.au as soon as you receive your password.
Your Course

Your course is aligned to the National Maritime Training Package TDM07 and provides you with the educational pathway to a Deck Watchkeeper or Master < 500GT Certificate of competency.

The TDM50307 Diploma of Transport and Distribution (Maritime Operations – Deck Watchkeeper) satisfies the educational requirements for certification as Deck Watchkeeper as described in Marine Orders - Part 3: Seagoing Qualifications (Issue 6) under the Australian Navigation Act 1912 and downloadable from the AMSA website - http://www.amsa.gov.au

NOTE: Individuals being assessed under statutory licensing and industry registration systems must comply with training and experience requirements additional to the minimum requirements identified in TDM07 Training Package, as defined by the relevant State or Territory marine authority or Australian Maritime Safety Authority (AMSA).

For many occupations involved in maritime operations, it is necessary to hold a Certificate of Competency or at least to have completed specific certification requirements before a person can be actively employed on the types of vessels concerned in particular operational areas. These certification requirements include educational requirements as well as a range of other requirements such as periods of sea time on particular vessels, medical certificates, radio operator certificates, etc.

The successful completion of this course is only a partial fulfilment of the regulatory requirements that must be demonstrated by a person seeking a Certificate of Competency. The other requirements such as sea time, oral assessments and the holding of other certificates are specified by AMSA in the Marine Orders.

Further information on related certification requirements can be obtained by contacting the Australian Maritime Safety Authority (AMSA) on (02) 6279 5000 or visit their website at: http://www.amsa.gov.au
Duration

Students MUST complete this course within two years of initial enrolment. Oral exams must be completed with AMSA within 3 years from initial enrolment.
# Units of Competency

Your course is made up of *Units of Competency* (or *Units*). The units of competency required for you to gain the Diploma are listed below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Name</th>
<th>Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDMMMA1707A</td>
<td>Determine Stability and Trim</td>
<td>36</td>
</tr>
<tr>
<td>TDMMMA707B</td>
<td>Monitor loading, stowage, security and unloading of cargo</td>
<td>30</td>
</tr>
<tr>
<td>TDMMMA807B</td>
<td>Monitor the care of cargo</td>
<td>22</td>
</tr>
<tr>
<td>TDMMMB4607A</td>
<td>Apply information of vessel structure to maintenance &amp; seaworthiness</td>
<td>66</td>
</tr>
<tr>
<td>TDMMMC307B</td>
<td>Manoeuvre and handle a vessel</td>
<td>18</td>
</tr>
<tr>
<td>TDMMME207B</td>
<td>Communicate using standard marine vocabulary</td>
<td>6</td>
</tr>
<tr>
<td>*TDMMME307B</td>
<td>Transmit and receive information by visual signalling</td>
<td>30</td>
</tr>
<tr>
<td>TDMMME507B</td>
<td>Transmit and receive information by marine radio or telephone</td>
<td>15</td>
</tr>
<tr>
<td>*TDMMME807C</td>
<td>Transmit and receive information by GMDSS subsystems &amp; equipment</td>
<td>44</td>
</tr>
<tr>
<td>TDMMF2107B</td>
<td>Control safe access to and on a vessel</td>
<td>12</td>
</tr>
<tr>
<td>*TDMMF5607A</td>
<td>Observe personal safety and social responsibilities</td>
<td>8</td>
</tr>
<tr>
<td>*TDMMF6107A</td>
<td>Manage marine fire fighting and prevention activities on board a vessel</td>
<td>38</td>
</tr>
<tr>
<td>*TDMMF6207A</td>
<td>Prevent, control and fight fires on board an ocean-going vessel</td>
<td>24</td>
</tr>
<tr>
<td>*TDMMF1007B</td>
<td>Provide elementary first aid</td>
<td>18</td>
</tr>
<tr>
<td>*TDMMF1107B</td>
<td>Survive at sea in the event of vessel abandonment</td>
<td>20</td>
</tr>
<tr>
<td>TDMMF5807A</td>
<td>Tanker familiarisation</td>
<td>18</td>
</tr>
<tr>
<td>TDMMH1607A</td>
<td>Determine position of the vessel</td>
<td>78</td>
</tr>
<tr>
<td>TDMMH1907A</td>
<td>Plan a passage</td>
<td>12</td>
</tr>
<tr>
<td>*TDMMF1807B</td>
<td>Apply medical first aid on board a vessel</td>
<td>28</td>
</tr>
<tr>
<td>TDMMF3007B</td>
<td>Maintain a safe navigational watch</td>
<td>50</td>
</tr>
<tr>
<td>TDMMH507B</td>
<td>Use radar and other bridge equipment to maintain safe</td>
<td>120</td>
</tr>
<tr>
<td>TDMLL307B</td>
<td>Establish and maintain a harmonious workplace</td>
<td>9</td>
</tr>
<tr>
<td>TDMMU407B</td>
<td>Ensure compliance with pollution prevention measures</td>
<td>15</td>
</tr>
</tbody>
</table>

### Additional units required for Master < 500GT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Name</th>
<th>Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDMMH1707A</td>
<td>Command Navigation</td>
<td>48</td>
</tr>
<tr>
<td>TDMMB4807A</td>
<td>Operations and maintenance on vessels</td>
<td>12</td>
</tr>
<tr>
<td>TDMLL507A</td>
<td>Manage business and ship administration</td>
<td>36</td>
</tr>
<tr>
<td>*TDMMF607B</td>
<td>Organise and manage the provision of medical care on board a vessel</td>
<td>60</td>
</tr>
</tbody>
</table>

*denotes that unit must be completed as part of AMSA approved ‘short course’ and evidence submitted to OTEN on completion.
‘Recognition’ for Unit of Competency

Please note that you can apply for recognition for any unit within your course.

However, before recognition is granted you will have to provide sufficient evidence and complete the relevant recognition application forms.

Also note that AMSA have special requirements regarding recognition. Recognition will only be automatically approved if previous study has completed as part of an AMSA approved course at an AMSA approved RTO. If you are considering applying for recognition for any part of your course please discuss first with the Maritime Studies section.

Recognition application forms for your course can be accessed from your course page from the OTEN website. Go to www.oten.edu/oten/maritime and click on your course.

See the full information on recognition including the ‘Recognition for Unit of Competency (pink) forms’ which detail the Competency Elements for each unit in your course. You may apply for recognition for any unit within your course if you can provide sufficient evidence. Submit the forms together with evidence, either with your enrolment or shortly after to OTEN.

Note, as we issue a ‘current’ certificate, evidence provided for recognition must include recent evidence. If your qualifications/ previous study are more than five years old, you will need to provide additional evidence of currency. This may take the form of copies of recent log books, work records, reference from employer or other. If you cannot provide current evidence then you will be required to sit a challenge test, or complete the unit. If you do not pass the challenge test you will be required to complete the unit. This is an AMSA requirement.

Note, all evidence submitted must be signed by a Justice of the Peace as a 'True and correct copy' of the original.

Your enrolment

You will be enrolled in your course in ‘stages’. Initially you will be enrolled in Block A & B units. Please contact the section when you wish to be enrolled in block C of units.

It is your responsibility to keep track of your enrolment and make sure that you either complete or gain recognition for all units required to complete your course. If you have any queries regarding your enrolment at any stage please contact the Maritime Studies section.

If you have submitted most assignments for a previous stage you must contact Maritime Studies to request to be enrolled in the next stage of units.
Discharging Cargo from *Aurora Australis*
Your learning materials

Maritime Learning Resources (MLRs)

OTEN Maritime provides you with several topic based learning resources known as MLRs. This is because once enrolled you will notice that there is quite some overlap of content between the various units in your course. These are a valuable set of resources that you should keep even after completing your course.

*Activities & Check your progress exercises*

As you work through the MLRs you’ll come across a range of Activities and or Check Your Progress exercises. It’s very important that you complete all these activities as they’re designed to help you understand the topic. The activities will also prepare you for the check our progress exercises and the assessment tasks. You’ll find feedback for the activities either straight after the activity or in the suggested responses at the end of the section.

Pathway through your resources

In this guide you will find a suggested pathway of what you need to study in order to complete each assignment. Please study all the resources as indicated prior to completing your assignments.

Assessment Guide

For each unit you will receive detailed information on the assessment tasks required to be assessed as competent (pass) each unit.

Each assessment has a unique Learning Activity (LA) number

Please note that within this course many of the unit assessments are clustered with other assessments. When you look at the assessment for each unit there may therefore appear to be many more assessments than there actually are. Note that assessments that are clustered have the same Learning Activity (LA) number.

You will find the Assessment Guide within this Course Guide.

Assignments and Marks Record Slips are in your OTAB book.

Please ensure when you are submitting an assignment that you submit the correct Marks Record Slip (MRS) so that the correct assignment is recorded.
on our administration system. If you are submitting an assignment online via the OLS (Online Learning Support) website the MRS will be allocated automatically and you do not need to attach one.

Supplementary Notes

For your convenience we have also provided some Supplementary notes. Please refer to these as indicated in your Learning Resource Overview.

Other resources

Text books

Many required texts will be available either on board or in the offices of many commercial vessels. Some material is also freely available on the web. You may also be able to borrow some text/ reference books from TAFE libraries. Alternatively if you wish to buy texts these may be purchased from a boating bookshop such as Boat Books.

A full list of recommended texts/reference material is available on the following page.

Boat Books

You can obtain nautical texts, charts and navigational plotting equipment from Boat Books:

31 Albany St, Crows Nest
NSW 2065 AUSTRALIA
T: +61 2 9439 1133
F: +61 2 9439 8517
www.boatbooks-aust.com.au

*Mention that you are an OTEN student and Boat Books will give you a discount on Charts required for your OTEN studies.

Other bookstores you may want to check include:

www.amazon.com
www.bookdepository.co.uk Free postage to anywhere in the world

You can also purchase navigational plotting instruments from most boating and yachting suppliers for eg Whitworths.

Whitworths

http://www.whitworths.com.au

Where you can borrow

As a student of OTEN you’re entitled to borrow books, videos and DVDs from the library at any TAFE NSW college.
You can use the TAFEcat library catalogue to find out the location of books etc. Go to http://tafecat.tafensw.edu.au or access the TAFEcat via the DET Student portal.

You will need a TAFEcard to borrow from TAFE NSW libraries. Please take your ‘confirmation of enrolment’ form to any NSW TAFE College and they will take your photo and arrange for a TAFEcard to be issued to you.

**OLS website**

Look on the OLS website for additional helpful resources. For most units you will find various other resources such as quizzes, videos, weblinks etc to help you with your studies.

**Text Books & Equipment to Purchase (approximate costs)**


**Recommended to purchase**


**Navigation Charts & Instruments**

- Chart AUS 252 $35
- Parallel rules $50
- Dividers $40
- Compass with pencil $40
- 2B pencils & Eraser $5
Further Reading list

This list contains many texts/ references that you will find useful in supplementing your study.

Please note that in most cases only older editions are located in TAFE libraries

The following publications are usually carried aboard commercial vessels:

<table>
<thead>
<tr>
<th>Publication</th>
<th>Available in TAFE Libraries</th>
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</thead>
<tbody>
<tr>
<td><strong>International Code of Signals.</strong> Reference for all visual signalling and standard phrases.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Admiralty List of Radio Signals</strong> Reference for GMDSS, radio signals, time signals, electronic nav, meteorology, VTS, pilots and port operations</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Australian Seafarers Handbook.</strong> 2nd Edition Reference for navigation and legislation in Australian waters</td>
<td>1st Edition only</td>
</tr>
<tr>
<td><strong>Admiralty Sailing Directions.</strong> Hydrographic Office, UK. Often referred to as Pilots, Sailing Directions are designed for use by all classes of ocean-going vessels with essential information on all aspects of navigation. Sailing Directions are complementary to Admiralty Standard Nautical Charts and provide worldwide coverage in 74 volumes.</td>
<td>No</td>
</tr>
<tr>
<td>Title</td>
<td>Edition</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Ocean Passages Of The World. 5th Edition (2004). Admiralty, UK.</td>
<td></td>
</tr>
<tr>
<td>Australian National Tide Tables. Current year – Tidal information for Australian waters</td>
<td></td>
</tr>
<tr>
<td>Admiralty Tide Tables. Current year – Tidal information worldwide</td>
<td></td>
</tr>
<tr>
<td>Code of Safe Practices for Solid Bulk Cargoes (BC Code), IMO.</td>
<td></td>
</tr>
<tr>
<td>IALA Maritime Buoyage System (NP735)</td>
<td></td>
</tr>
<tr>
<td>The Mariner's Handbook (NP100) 9th Edition (2009)</td>
<td></td>
</tr>
<tr>
<td>Publication</td>
<td>Available in TAFE Libraries</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td><strong>Guide To The Planning &amp; Conduct Of Sea Passages.</strong> HMSO, UK. Reference for passage planning</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Modern Chartwork,</strong> Squair. (1992), 6th edition Additional coastal navigation reference</td>
<td>5th edition only</td>
</tr>
<tr>
<td>Book Title</td>
<td>Author/Year</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td><em>Ship Construction Sketches &amp; Notes</em></td>
<td>Kemp &amp; Young (1997), 2nd Ed.</td>
</tr>
<tr>
<td><em>Australian Boating Manual</em></td>
<td>Gandy (2009), 4th Ed.</td>
</tr>
<tr>
<td><em>Marine Electronic Navigation</em></td>
<td>Appleyard (1988), Enlarged 2nd Ed.</td>
</tr>
<tr>
<td><em>Shipboard Operations</em></td>
<td>Lavery (1990), 2nd Ed. Heinemann, Oxford</td>
</tr>
<tr>
<td><em>Notes on Compass work</em></td>
<td>Kemp &amp; Young (1979)</td>
</tr>
<tr>
<td><em>Parallel Indexing Techniques</em></td>
<td>Smith (1995), Reprint</td>
</tr>
<tr>
<td><em>Notes on Cargo Work</em></td>
<td>Kemp &amp; Young (2002)</td>
</tr>
<tr>
<td><em>Bulk Carrier Practice</em></td>
<td>Isbester Jack (2010), 2nd Ed.</td>
</tr>
<tr>
<td><em>Manoeuvring Single Screw Vessels Fitted with Controllable Pitch Propellers in Confined Waters</em></td>
<td>Henson (1994)</td>
</tr>
<tr>
<td><em>Theory &amp; Practice of Seamanship</em></td>
<td>Danton (1996), 11th Ed.</td>
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<tbody>
<tr>
<td>Additional reference for weather</td>
<td></td>
</tr>
<tr>
<td><strong>Meteorology for Seafarers.</strong> Frampton &amp; Uttridge. 3rd edition (2008).</td>
<td>No</td>
</tr>
<tr>
<td>Additional reference for weather</td>
<td></td>
</tr>
</tbody>
</table>
### Publications available online:

<table>
<thead>
<tr>
<th>Publication</th>
<th>Available in TAFE Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Marine Communication Phrases Reference for signalling and communication <a href="http://www.imo.org/includes/blastData.asp/doc_id=10910/A%20918(22).pdf">www.imo.org/includes/blastData.asp/doc_id=10910/A%20918(22).pdf</a></td>
<td>Yes</td>
</tr>
<tr>
<td>SOLAS – IMO summary and amendments <a href="http://www.imo.org/conventions/mainframe.asp?topic_id=250">www.imo.org/conventions/mainframe.asp?topic_id=250</a></td>
<td>Yes</td>
</tr>
<tr>
<td>OH&amp;S Act, and OH&amp;S Regulation, Codes of Practice, Safety guidelines <a href="http://www.comlaw.gov.au/laws_and_regulations/ohs_act,_regulations__and__code">http://www.comlaw.gov.au/laws_and_regulations/ohs_act,_regulations__and__code</a></td>
<td>Yes</td>
</tr>
<tr>
<td>American Practical Navigator Bowditch In depth textbook on all aspects of navigation. <a href="http://www.irbs.com/bowditch">www.irbs.com/bowditch</a></td>
<td>Yes</td>
</tr>
</tbody>
</table>
Web links /Internet sites

Other publications on specialised and general maritime subjects are available through:

Nautical Institute

International Chamber of Shipping (includes numerous free resources)
http://www.marisec.org/publications.html

International Maritime Organisation (IMO)
International Codes and Conventions
www.imo.org

Cargo Law
Maritime accident case studies
http://www.cargolaw.com/

Bureau of Meteorology
Weather information

Navigation charts and publications
Australian Hydrographic Service

OTEN Home Page

OTEN tutorials and information – mostly lower grade certificates
www.otenmaritime.com
Your assessment

Course Grading

Your course is not graded. You will be awarded a Diploma on successful completion or on gaining recognition for all units required. You will be awarded a competent/not yet competent final grade only for each unit.

Unit assessments

You will be required to complete a number of activities in order to demonstrate competence in the units in your course.

These activities may include all or some of the following:

- Assignment/s.
- OTAB book activities
- Classroom attendance (minimum 80% attendance required)
- Simulator assessments
- Written Tests (exams)

You must pass all Activities for each unit before you are eligible for a final result.

You will be awarded a competent/not yet competent final grade only for each unit.

You will find more detailed advice regarding assessment in the Assessment Guide located towards the end of this guide.
Assignments

Assignments are work you send in to your teacher for comment.

Your assignments are located in the back of your OTAB book.

Plagiarism

Plagiarism is the action or practice of taking the thoughts, words or writing of another person without appropriate acknowledgement and using them as your own.

All work submitted to OTEN must be your own work.

When submitting your assignments/assessments remember to sign (or tick in the case of online submissions) the ‘Plagiarism Declaration’ to indicate that all work submitted is your own.

If you need more information on plagiarism and guidelines on how to avoid it, contact your teacher or visit the OLS.

If submitting your assignments by post you must keep a copy.

We can not be responsible for assignments that go ‘missing’.

Submitting assignments

POST: You can submit your assignments by post. The postal address is:

BITI
Open Training and Education Network
51 Wentworth Rd,
Strathfield NSW 2135

OLS: Login to the OLS site via www.oten.edu.au and go to your unit Assessment tab. Upload your assignment as indicated.

Email: oten.biti@tafensw.edu.au
(please only email if you cannot upload to the OLS)

Assignments that contain chartwork should be posted.

Assignments should be returned to you within 2-3 weeks.

Assignments uploaded to the OLS should be returned much faster.

Contact Maritime Studies if you still haven’t received your assignment back within 3 weeks. Don’t wait until your assignment is returned to you before going on with other work. Please keep a copy of assignments. We can not be responsible for assignments that go ‘missing’.
Tests (Exams)

Tests will be sat during block attendance times. You will be advised of the exact time of your test during your block attendance.

Be sure to take your TAFEcard with you to your test, as you will be required to produce it for ID.

Result Slips

Each assessment event has its own result slip. Before forwarding an assignment or other assessment event check that it has the relevant result slip attached to the front of it.

NOTE If you submit your assignment electronically via the OLS you needn’t attach the result slip. A result slip is automatically generated.

Student barcode labels

You must attach one of your student barcode labels to the Result slip, so that our computer can identify your work. However, if for some reason you do not have a supply of labels, you should write your name and barcode number on your Result slip and forward your work to OTEN. Contact Maritime studies if you need to request more barcodes.

NOTE If you submit your assignment electronically via the OLS you needn’t attach a barcode as it is generated automatically.
Studying through OTEN

The OTEN Learning Support site

It is essential that you become familiar with The OTEN Learning Support (OLS) site.

Login to the OLS and you can:

- Keep track of assessments completed.
- Download your assignments in either PDF or Word format
- Access extra resources to help you with your studies
- Submit your assignments online (if you wish)
- Check your course and unit progress
- Update your details (address etc)
- Access general OTEN student information

To access the site, go the OTEN home page [www.oten.edu.au](http://www.oten.edu.au) and login using your DET Portal login name and password.

You will receive you login details and password a few days to a week after enrolment. As soon as you receive you password you should log in to the OLS and have a good look at all the information there.

**Note** In order to access PDF files, and quiz content on the OLS you should download Adobe Reader and the latest version of Adobe Flash Player. Please go to [www.adobe.com](http://www.adobe.com) and click on the links and follow the prompts to download the latest Adobe Reader and Adobe Flash player.

Email

It is essential you check your email regularly. OTEN Maritime studies uses email frequently to communicate with you.

All students are given a TAFE email account when you enrol. You access your TAFE email account via the DET Portal.

If you prefer to receive emails to your current email you can select your ‘preferred email’ via the ‘My Details’ screen on the OLS website.
DET Student Portal

The DET Student Portal provides you with one seamless gateway to a range of online services including such as:

- Your TAFE Email account
- Student E Services
- TAFEcet (online Library catalogue)

After enrolment your username and password will be posted to you. Go to www.oten.edu.au and login with the username and password sent to you.

Student E Services (SES) website

The SES website gives you your complete TAFE NSW study history.

Via the SES website you can:

- view your current and previous TAFE course results.
- Check results and recognition
- request a copy of academic transcript
- update your contact details via this site.

Go to www.oten.edu.au and login with the username and password (sent to you after enrolment.)

Block classes

Block classes will be held as indicated in the block classes timetable.

Online classes

Online classes may be scheduled in the near future. Online classes will be delivered via Adobe Connect on the web. You do not need any particular software to join in a class but you will need access to a headset (preferably with a microphone).

The online classes are optional and are supplementary to Course notes and block attendance.

You will be notified of any upcoming online classes by email.

If you are not available to attend at the nominated time a recording of the session will be available on the OLS web site.

Before attending an Online class you should test your computer.

To test your computer go to:

Follow the prompts. You may need to download the latest flash and an Adobe Connect add-in to enable your computer to login to online classes.
You will be notified by email of scheduled Online classes. Please go to the room at the nominated time.

To login:
Go to our online room at http://webconf.det.nsw.edu.au/otenmaritime/
Please log in as ‘Guest’ with your first and second name For eg Alan Smith.

Anchoring procedure
Your progress

As your initial study in your course is self-paced, it is up to you to work out a study plan to enable you to submit your required assignments prior to attending your block classes.

It is also up to you to check that you are enrolled or have received recognition in all units necessary for course completion. You can keep track of your enrolment by accessing the OLS website and checking results and recognition also on the SES website.

We strongly advise that you plan your studies carefully and work at a steady pace so that you are able to complete your course within the set time limit.

**You have 2 years from enrolment in which to complete your course.**

AMSA stipulates that you must complete your oral examinations **within 3 years** from completion of your OTEN course.

**Centrelink**

If you receive a Centrelink student payment to study, you are expected to complete your course within the time allocated by Centrelink. This time may be less than the time OTEN allows. You are also required to show consistent and regular progress through your course, and complete units regularly throughout your enrolment. If you do not, you may incur a debt which you will have to pay.
Motivation & planning

OTEN offers you the benefit of allowing you to complete your course flexibly. For some students this is a wonderful opportunity to direct and timetable their studies to suit themselves, for other students this can almost be overwhelming. In order to navigate your course in the shortest and easiest time possible we suggest you follow the points below:

- **Prepare yourself.**
  To succeed in your OTEN course you need to prepare yourself for study. READ all the Course Information, including this guide, carefully.

- **Plan exactly when and where you are going to study.**
  For most students even 10 hours a week is quite a large commitment. 10 hours a week doesn’t just ‘happen’. If you are currently in full-time employment and also juggling a relationship and/or family then you will need to carefully plan exactly when you are going to study. Literally go and get your calendar NOW and mark in it the times of the week that you will have free and undisturbed to do your study. In order to get this time you may well have to negotiate with other members of your household, colleagues or family first. It is very important you have some undisturbed time in which to study or else you will find the course very difficult to complete.

- **Finally you receive your long awaited Learning Materials – Get organised!**
  You are completely amazed at the amount of material and for a moment wonder if you will ever get through it. Don’t stand there scratching your head for too long…GET ORGANISED go out and buy some folders, clear off some desk space or a shelf and ‘stow’ your materials.

- **Stick up a wall calendar of important dates**
  We also suggest getting a large size calendar or planner that you can stick on the wall like a poster and fill in your important dates such as Block classes you plan to attend and when you plan to submit your assignments.

- **Stick to your plan**
  If you have done everything listed in points 1 - 8 you will be well on the way to completing your course. Getting started is probably the biggest obstacle and if you have attended UnderWay then you have started. Now you just need to drag up your self-discipline and keep going!

- **Study frustrations…. “This doesn’t make sense”; “why can’t I get that answer”; “I feel stupid”; “this course is too hard”…etc etc**
  At OTEN Maritime Studies we have tried to make the very best learning resources and study guides so that you can achieve your learning required for your course. Most of the time we are sure that you will be happy with our resources, however, there may be times when you have trouble understanding something.
  If you have tried several times to understand something and still are
having trouble we suggest you contact us at OTEN Maritime Studies. If it is at a time you aren’t able to contact us, don’t waste your whole study session or get too frustrated and give up! Instead go on to something else and contact us when you are able.

- **Errata**
  Note that any ‘Errata’ for course material is published on the OLS website. It may be what is frustrating you might have a solution published here.

- **Keep going – stay committed to your goals!**
  As I said earlier, study just doesn’t ‘happen’. It requires much planning and after the planning stage is over it requires much commitment to keep going. At OTEN Maritime we understand that ‘life’ happens. There will always be plenty of distractions. If you want to complete your course you will need to stay focussed and exercise a lot of self discipline. We are here to assist you with your studies as much as we can, however, ultimately it is you that has to do the study and practice the practical skills required to pass your course.

- **Keep track of your studies.**
  You can monitor your progress via the OLS website. You can also manually cross off assessments as you go in the Unit table in this guide. Either way, you need to make sure that you complete or gain recognition for all the required units in your course.

- **Tests**
  Tests will be completed during your block attendance.

  **Good luck and stay motivated!**
Introduction to your teacher

When you send in an assignment, complete and attach the *Introduction to your teacher* form. It may take a little time to complete, but it will be well worth it in the long run. The more information your teacher has, the better the assistance you will receive.

To save you repeating it, make copies or an electronic version and attach one when you send in an assignment.

If you are uploading your assignments to the OLS add a short letter about yourself to the front of your assignment or Zip, it together with your assignment.
Introduction to your teacher

The purpose of this form is to introduce you to your teacher. The more your teacher knows about you, the more help he or she can give you.

Module number and name: ____________________________________________________________

Course number and name: ____________________________________________________________

Name in full: __________________________ surname (block letters) __________________________

Mr
Mrs
Miss
Ms

First or given names: __________________________

Full postal address: _________________________________________________________________

_______________________________________________________________________________

_______________________________________________________________________________

Postcode __________________________

Telephone number: home __________________________ work __________________________

Age:
(tick) Under 21 21–30 31–40 41–50 51–60 over 60

Other modules being studied

(a) by correspondence: _______________________________________________________________

(b) by class attendance: _____________________________________________________________

Education

Name of school: ___________________________________________________________ Years: ______

Examinations passed: _____________________________________________________________

Any further studies since leaving school: ______________________________________________

Occupation

What is your occupation? ____________________________________________________________

(describe the kind of work you do)

Employer’s name and address: _________________________________________________________

(... continued over page)
Letter to your teacher

Some points to note in your letter to your teacher are:

- your main areas of interest in the course
- your relevant employment experience
- areas of study you think you may have some difficulties with
- any specific disability you may have which is relevant to your study.

Date:__________ Signature:__________

Please enclose copies of this letter with the first assignment for each unit.
Location Maps

Due to various circumstances venues may be subject to change. In the event of a change of location you will be notified.
Block Classes
- OTEN

To get to OTEN by train leave Strathfield station at the Northern entrance, turn right along Everton Rd and continue walking until you reach Wentworth Rd. Turn Right and continue a short way. The main OTEN entrance is on your right. If coming by Car along Parramatta Rd, turn into Wentworth Rd and proceed to OTEN. OTEN is on your right.

Parking is only available on-site in the evening (after 5.30PM) and on the weekends. If attending during the week during working hours, all day metered parking is available on Wentworth Rd next to OTEN and 2 hr parking is available in surrounding streets.

Lunch can be purchased at either Strathfield or Burwood shopping areas. You might also bring lunch with you.
Block Classes
- Sydney Institute Technology

The Maritime section at Sydney Institute of Technology is located on level 7 in Building W (Marcus Clarke Building) on George St, Sydney (opposite Central Railway).

There is only limited parking in this area. We recommend travelling by public transport. If travelling by car we suggest parking in one of the parking stations indicated on the map.
Accommodation

For students travelling to Sydney and requiring overnight accommodation please look at the suggestion below or access one of the many deals that can be obtained at [www.wotif.com](http://www.wotif.com) or [www.lastminute.com.au](http://www.lastminute.com.au)

Please contact the hotels below directly for current pricing.

**Strathfield Private Hotel** (walking distance from OTEN)
4 Churchill Ave
Strathfield, NSW 2135
Ph: (02) 9746 0334
Single rooms from $70- $80 per night.

**Sydney Central YHA**
Multishare Female or Male from $37 - $40 per bed;
Double Private Bathroom from $120 per room
Cnr Pitt and Rawson place opposite Central Railway Station
Ph: 02 9218 9000
Fax: 02 9218 9099
See [www.yha.com.au](http://www.yha.com.au) and go to Sydney-Central

**CB Hotel** (Maze backpackers)
Single rooms from $40 per night
417 Pitt Street (in between Goulburn & Campbell Streets)
Sydney, NSW 2000
Ph: (02) 92115115 or Free call: 1800 813 522 (within Australia Only)
Fax: +61 (02) 92819605
Email: info@mazebackpackers.com
[www.mazebackpackers.com](http://www.mazebackpackers.com)
OTAB
(OTEN Task and Assignment Book)

Before attending the relevant blocks you must also have completed the relevant ‘tasks’ in your OTAB book. Each task indicates after the heading if it is required for Block A, B or C.

Please note that you are also required to keep a Journal as evidence in order to complete some of the tasks that are stated in the OTAB book.

You must present the OTAB task book for marking during each block attendance.

Section 1

☐ Section 1 must be commenced shortly after enrolment and completed before Block C.

Section 2

Section 2 may be completed in stages as follows:

Before attending Block A you must complete OTAB tasks:

☐ PART A Priority Tasks
☐ PART B Safety on board, Survival and Fire Fighting
☐ PART F Navigation (Coastal Nav as indicated before block A)
☐ PART G Ship Operations and Structure (as Indicated block A)
☐ PART H Weather
☐ PART J Tanker Operations

Before attending Block B you must complete OTAB tasks:

☐ PART D Cargo Operations
☐ PART E Bridge Equipment
☐ PART F Navigation (Celestial Nav as indicated before block B)
☐ PART G Ship Operations and Structure (as Indicated block B)
☐ PART K Engineering Knowledge
Before attending Block C you must complete OTAB tasks:

- PART C Watch-keeping
- PART I Dry-docking Procedures

Section 3

Section 3 contains the assignments and must be submitted as follows.

Assignments

Assignments are found in Section 3 of your OTAB book and the relevant assignments must be submitted before attending the block sessions.

Before attending BLOCK A you must submit assignments:

- Assignment TDMMH1507A – Measure and observe weather conditions and interpret and apply to watchkeeping (LA013115)
- Assignment TDML307B/E207B – Communication (LA013126)
- Assignment 1 TDMMH1607A - Determine position of the vessel - Coastal Navigation (LA013121)
- Assignment TDMMB4607A - Apply information of vessel structure to maintenance and seaworthiness (LA013113)

Before attending BLOCK B you must submit assignments:

- Assignment 2 TDMMH1607A - Determine position of the vessel - Celestial navigation (LA013122)
- Assignment TDMA707B/ A807B - Cargo work (LA013132)
- Assignment TDMMH507B - Use radar and other bridge equipment to maintain safe navigation (LA013134).
- Assignment TDMA1707A - Determine stability and trim (LA013128)

Before attending BLOCK C you must submit assignments:

- Assignment TDMMU407B - Ensure compliance with pollution prevention measures (LA013136)
- Assignment TDMMF3007B - Maintain a safe navigational watch (LA013137)
- Assignment TDMMC307B - Manoeuvre and handle a vessel (LA013140)
- Assignment TDMMB4807A - Operations and maintenance on vessels (LA013142)
- Assignment TDML507A - Manage business and ship administration (LA013144)
Attendance at Block Classes

In order to gain a satisfactory attendance result you must attend at least 80% of block classes in each Block A, B and C.

Tests / Written Exams

You must pass the following Tests / Written Exams.

Block A

- Test 1 TDMMH1607A - Determine position of the vessel Coastal Navigation (LT013123)
- Test TDMMF2107B/F5907A/ Nautical. Knowledge.( LT013076)
- Test TDMMH1507A – Weather (LT013116)
- Test TDMMB4607 Survey & Documentation (LT013114)
- Test TDMMF5807A –Tanker (LT013125)
- Test TDMML307B/E207B – Communication (LT013127)
- Test TDMME307B - Visual signalling (LT013127)

Block B

- Test TDMMA1707A Stability (LT013131)
- Test TDMMB707B/ A807B - Cargo Work (LT013133)
- Test TDMMH507B - Radar and Bridge Equip (LT013135)
- Test 2 TDMMH1607A - Determine position of the vessel - Celestial Navigation (LT013124)

Block C

- Test TDMMH1907A/ H507B/ U407B/ F3007B Bridge W/Keeping (LT013118)
- Test TDMMC307B - Ship Control (LT013141)
- Test TDMMB4807A Operations & maintenance on vessels (LT013143)
- Test TDMML507A Ship Business & Admin (LT013145)
- Test TDMMH1707A - Command Nav (LT013138)

Simulator Assessments

- Simulator Assignment- TDMMH1907A/ H1607A Passage Plan (LA013119)
- Simulator Test H1907A/H1607A/H507B/F3007B Passage Planning & Bridge W/K (LA013120)
- Simulator Test TDMMH1707A/C307B Command &Manoeuvre (LA013139)
## Assessment by unit

**TDMMF2107B Control safe access to and on vessel**

In order to receive a competent result in this unit you are required to pass the following learning activities:

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
<th>Pass mark</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013076</td>
<td>Test TDMMF2107B/F5907A Nautical Knowledge</td>
<td>50%</td>
<td>Block A</td>
</tr>
</tbody>
</table>

**TDMMF5907A Work safely in enclosed spaces**

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
<th>Pass mark</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LA013079</td>
<td>Attendance - Block B</td>
<td>80%</td>
<td>Block B</td>
</tr>
<tr>
<td>LT013076</td>
<td>Test TDMMF2107B/F5907A Nautical Knowledge</td>
<td>50%</td>
<td>Block A</td>
</tr>
</tbody>
</table>

**TDMMB4607A Apply information of vessel structure to maintenance and seaworthiness**

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
<th>Pass mark</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013113</td>
<td>Assignment TDMMB4607A - Structure &amp; Seaworthiness</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013114</td>
<td>Test TDMMB4607 Survey &amp; Documentation</td>
<td>60%</td>
<td>Block A</td>
</tr>
</tbody>
</table>
### TDMMH1507A Measure and observe weather conditions and interpret and apply to watchkeeping

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
<th>Pass mark</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013115</td>
<td>Assignment TDMMH1507A - Weather</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013116</td>
<td>Test TDMMH1507A - Weather</td>
<td>60%</td>
<td>Block A</td>
</tr>
</tbody>
</table>

### TDMMH1907A Plan a passage

<table>
<thead>
<tr>
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<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LA013079</td>
<td>Attendance - Block B</td>
<td>80%</td>
<td>Block B</td>
</tr>
<tr>
<td>LA013117</td>
<td>Attendance - Block C</td>
<td>80%</td>
<td>Block C</td>
</tr>
<tr>
<td>LT013118</td>
<td>Test Bridge W/Keep H1907A/ H507B/ U407B/ F3007B</td>
<td>70%</td>
<td>Block C</td>
</tr>
<tr>
<td>LA013119</td>
<td>Simulator Assign- TDMMH1907A/ H1607A Passage Plan</td>
<td>pass/fail</td>
<td>Block C</td>
</tr>
<tr>
<td>LA013120</td>
<td>Sim test H1907A/H1607A/H507B/F3007B Passage Planning &amp; Bridge W/K</td>
<td>pass/fail</td>
<td>Block C</td>
</tr>
</tbody>
</table>
## TDMMH1607A Determine position of the vessel

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
<th>Pass mark</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013121</td>
<td>Assignment 1 TDMMH1607A - Coastal Navigation</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td></td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LT013123</td>
<td>Test 1 TDMMH1607A - Coastal Navigation</td>
<td>60%</td>
<td>Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LA013122</td>
<td>Assignment 2 TDMMH1607A - Celestial Navigation</td>
<td>pass/fail</td>
<td>Prior to Block B</td>
</tr>
<tr>
<td>LA013079</td>
<td>Attendance - Block B</td>
<td>80%</td>
<td>Block B</td>
</tr>
<tr>
<td>LT013124</td>
<td>Test 2 TDMMH1607A - Celestial Navigation</td>
<td>60%</td>
<td>Block B</td>
</tr>
<tr>
<td>LA013119</td>
<td>Simulator Assign- TDMMH1907A/H1607A Passage Plan</td>
<td>pass/fail</td>
<td>Block C</td>
</tr>
<tr>
<td>LA013120</td>
<td>Sim test H1907A/H1607A/H507B/F3007B Passage Planning &amp; Bridge W/K</td>
<td>pass/fail</td>
<td>Block C</td>
</tr>
<tr>
<td>LA013117</td>
<td>Attendance - Block C</td>
<td>80%</td>
<td>Block C</td>
</tr>
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</table>

## TDMMF5807A Adapt to basic industry and regulatory requirements for tanker operations

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013125</td>
<td>Test TDMMF5807A - Tanker Operations</td>
<td>60%</td>
<td>Block A</td>
</tr>
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</table>
TDMML307B Establish and maintain a harmonious workplace environment

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
<th>Pass mark</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA013126</td>
<td>Assignment TDMML307B/E207B (DK Watchkeeper)</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013127</td>
<td>Test TDMML307B/E207B - Communication (Dk W/keeper)</td>
<td>60%</td>
<td>Block A</td>
</tr>
</tbody>
</table>

TDMME207B Communicate using standard marine vocabulary

<table>
<thead>
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</tr>
</thead>
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<tr>
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<td>pass/fail</td>
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<td>LA013077</td>
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<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013127</td>
<td>Test TDMML307B/E207B - Communication (Dk W/keeper)</td>
<td>60%</td>
<td>Block A</td>
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</table>

TDMME307B Transmit and receive information by visual signalling

<table>
<thead>
<tr>
<th>Activity number</th>
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<th>Pass mark</th>
<th>When</th>
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<tbody>
<tr>
<td>LA013126</td>
<td>Assignment TDMML307B/E207B (DK Watchkeeper)</td>
<td>pass/fail</td>
<td>Prior to Block A</td>
</tr>
<tr>
<td>LA013077</td>
<td>OTAB completion - Block A</td>
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<tr>
<td>LA013078</td>
<td>Attendance - Block A</td>
<td>80%</td>
<td>Block A</td>
</tr>
<tr>
<td>LT013127</td>
<td>Test TDMML307B/E207B - Communication (Dk W/keeper)</td>
<td>60</td>
<td>Block A</td>
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## TDMMA1707A Determine the stability and trim of the vessel

<table>
<thead>
<tr>
<th>Activity number</th>
<th>Activity name</th>
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<tbody>
<tr>
<td>LA013128</td>
<td>Assignment TDMMA1707A - Stability &amp; Trim</td>
<td>pass/fail</td>
<td>Prior to Block B</td>
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<tr>
<td>LA013129</td>
<td>OTAB Completion B</td>
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<td>LA013079</td>
<td>Attendance - Block B</td>
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</tr>
<tr>
<td>LT013131</td>
<td>Test TDMMA1707A Stability</td>
<td>50%</td>
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## TDMMA707B Monitor the loading, stowage, security and unloading of cargo

<table>
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<tr>
<th>Activity number</th>
<th>Activity name</th>
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<tr>
<td>LA013132</td>
<td>Assignment TDMMA707B/ A807B - Cargo Work</td>
<td>pass/fail</td>
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</tr>
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<td>LA013129</td>
<td>OTAB Completion B</td>
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<td>LA013079</td>
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<tr>
<td>LT013133</td>
<td>Test TDMMA707B/ A807B - Cargo Work</td>
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## TDMMA807B Monitor the care of cargo during a voyage

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<tr>
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<tr>
<td>LA013132</td>
<td>Assignment TDMMA707B/ A807B - Cargo Work</td>
<td>pass/fail</td>
<td>Prior to Block B</td>
</tr>
<tr>
<td>LA013129</td>
<td>OTAB Completion B</td>
<td>pass/fail</td>
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<td>LA013079</td>
<td>Attendance - Block B</td>
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<td>Test TDMMA707B/ A807B - Cargo Work</td>
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### TDMMH507B Use radar and other bridge equipment to maintain safe navigation

<table>
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<td>LA013134</td>
<td>Assignment TDMMH507B - Radar and Bridge Equip.</td>
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<td>LA013129</td>
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<td>LT013135</td>
<td>Test TDMMH507B - Radar and Bridge Equip</td>
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<td>Block B</td>
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<tr>
<td>LT013118</td>
<td>Test Bridge W/Keep H1907A/ H507B/ U407B/ F3007B</td>
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<td>LA013120</td>
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<td>LA013117</td>
<td>Attendance - Block C</td>
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### TDMMU407B Ensure compliance with pollution prevention measures

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<tr>
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<td>Assignment TDMMU407B - Pollution</td>
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<td>LA013130</td>
<td>OTAB Completion C</td>
<td>pass/fail</td>
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<td>LA013117</td>
<td>Attendance - Block C</td>
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<tr>
<td>LT013118</td>
<td>Test Bridge W/Keep H1907A/ H507B/ U407B/ F3007B</td>
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## TDMMF3007B Maintain a safe navigational watch

<table>
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<td>LA013130</td>
<td>OTAB Completion C</td>
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<td>LA013117</td>
<td>Attendance - Block C</td>
<td>80%</td>
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<tr>
<td>LT013118</td>
<td>Test Bridge W/Keep H1907A/ H507B/ U407B/ F3007B</td>
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<tr>
<td>LA013120</td>
<td>Sim test H1907A/H1607A/H507B/F3007B Passage Planning &amp; Bridge W/K</td>
<td>pass/fail</td>
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## TDMMH1707A Apply command navigation procedures on vessels limited by tonnage or near coastal operations

<table>
<thead>
<tr>
<th>Activity number</th>
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<td>LT013138</td>
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<td>LA013139</td>
<td>Sim test TDMMH1707A/C307B Command &amp;Manoeuvre</td>
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## TDMMC307B Manoeuvre and handle the vessel in normal conditions

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<thead>
<tr>
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<tr>
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<td>LA013130</td>
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<td>LA013117</td>
<td>Attendance - Block C</td>
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<tr>
<td>LT013141</td>
<td>Test TDMMC307B - Ship Control</td>
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<td>Block C</td>
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<tr>
<td>LA013139</td>
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TDMMB4807A Manage the operations and maintenance on vessels limited by tonnage or near coastal operations

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>LA013142</td>
<td>Assignment TDMMB4807A - Op. &amp; Maintenance</td>
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<td>LA013117</td>
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<tr>
<td>LT013143</td>
<td>Test TDMMB4807A Operations &amp; maint. on vessels</td>
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TDMML507A Manage business and administration on vessels limited by tonnage or near coastal operations

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>LA013144</td>
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<td>LA013117</td>
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<tr>
<td>LT013145</td>
<td>Test TDMML507A Ship Business &amp; Admin</td>
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</table>
Suggested pathway through your learning resources

Important Note – AMSA Marine Orders

All the relevant AMSA Marine Orders must be read in conjunction with the subjects that are being studied for this course. Also you must access the AMSA web site regularly for updates on Marine Notices and to be familiar with all the recent changes.

You are expected to read and understand thoroughly the various requirements as per the ISM and the ISPS Code, SOLAS, MARPOL and STCW Conventions.

There is no limit to the knowledge that you are expected to grasp at this diploma level certificate of competency.

This document serves only as a basic guideline and a suggested pathway to guide you in each of the subjects that you have to study.

Tasks and assignments are all part of the assessment process and you must complete them in order to achieve a pass in the unit of competency.

There is a list of ‘additional reference’ materials and books that has been given which you are expected to research and read as required

If you have any queries please talk to the subject teacher who is there to guide you in your study.

Prior to attending BLOCK A

In order to complete the required assignments and OTAB sections before attending this block, there are several resources that you are required to access and study.

This section guides you through your subject learning materials and the necessary books that you will need to reference. You should check that you have a good understanding and, where required, practical skills in all the knowledge areas before attempting any of the assessment activities.

You should complete any ‘OTAB Sections’ as required for each block before attending the face-to-face class.

If you find that you have studied a resource listed in this section whilst completing another unit previously then only revise that resource as necessary.
In order to complete your assignments we recommend you study the following resources before attempting them.

**Coastal Navigation**

- **Study MLR 12; Navigation** complete all the check your progress at the end of each chapter. The chapters on “The sailings” and “Azimuth and Amplitude” are covered again in more depth when you study Celestial navigation, but provide a useful introduction to these topics.

- **Frost, A. Practical Navigation for Officers of the Watch. 1st edition** (2004). Study Section 1 and complete all exercises for the modules in that section as practice. These exercises will supplement those done in MLR 12. Module 1.6, The Sailings, may be left until the student is studying Celestial navigation and Module 1.8 Radar Navigation, is covered later in Electronic navigation, but is recommended study at this stage due to the extensive use of radar in coastal navigation.

  Note – in Frost Exercise 1.5.1, questions 4, 5, 6, 7 refer to the use of Admiralty Instruction chart 5051 (Lands End to Falmouth). If you wish to attempt these questions, that chart will need to be purchased. The questions cover further problems in set and leeway and if the student is confident with this, these problems need not be attempted.

- **Study Supplementary Notes - ICS Bridge procedures**, especially page 15 – plotting positions and navigation in coastal waters, pages 22-26 on navigation equipment and pages 28-30 on the use of charts.

- **Study Supplementary Notes NI Bridge Team Management**, especially page 15 on “Navigating with Integrated Bridge and electronic charts systems”

- **Study Supplementary Notes NI Bridge Watchkeeping**, especially the notes on “self checking” on page 15.

- **You should become completely familiar with chart 5011 – Symbols and Abbreviations Used on Admiralty Charts.**

**Chartwork** provides the basis for all navigational problems and you need to become completely proficient at using and understanding charts. The tasks listed in your OTEN Task and Assignment Book should be regarded as a minimum standard in Coastal navigation. Use your time at sea to become completely familiar with all navigational techniques, independent of the GPS. Take every opportunity to perform the following navigational tasks;

- Use **visual bearings**, including the use of transits, clearing and danger bearings, running fixes, doubling the angle on the bow and 3 bearing fixes.

- **Compare magnetic** and **gyro** compasses, determine the errors on each, determine the deviation of the magnetic compass on all headings and compare to the deviation card, become completely proficient in converting from true to compass bearings. You need to be able to determine variation at any position.
Tides – calculate the times and heights of high and low water for each port you visit – enter the results in your journal. Know how to use the tidal curves to be able to calculate intermediate times and heights if tides – this information is needed in order to allow a vessel to calculate a “tidal window” – a period of time when a vessel can transit an area of restricted under keel clearance.

Frequently calculate the set and leeway of your vessel in different conditions, a good navigator should know what performance his vessel will show in various conditions of load, draft and trim.

The sextant is not just used for taking astronomical sights. Become proficient at determining the range of an object by vertical sextant angles – check the range with you radar to become confident in your ability. Horizontal sextant angle will give accurate fixes without the need for compass bearings – this is an important skill for small vessels that may not have adequate means of taking bearings or in all vessels as a means to determine compass error.

Take every opportunity to get the OOW or the Master on your vessel to check your results and help with any problems that you encounter.

Remember that all stages of a voyage, a vessel must use at least two independent means of confirming the ships position – the use of GPS does not preclude the accurate plotting of the ships position by the use of bearings and ranges whenever possible.

Weather

- Read and study MLR 6 Meteorology MAR046 and complete all self-test questions at the end of each chapter
- Visit the Bureau of Meteorology website for further referencing, www.bom.gov.au. The site has much material that is useful for seafarers in the Australian region, including;
  - Coastal Waters and High seas forecasts
  - Tidal predictions
  - Marine warnings – including strong wind, gale and storm warnings
  - Coastal weather observations
  - Weather analysis and prognosis charts
  - Satellite images
  - Wind forecast charts.
Reference should be made to the *Mariners Handbook* as per the reference list. This reference, which should be present on the bridge of every vessel, gives much useful weather information in Chapter 7, especially that weather that directly affects seafarers, such as Tropical revolving storms, Fog, Fronts and Depression and Cloud types. It is recommended to study this chapter in detail to supplement your other notes.

Complete OTAB book PART H Weather

Assignment TDMMH1507A – Measure and observe weather conditions and interpret and apply to watchkeeping (LA013115)

A competent seafarer will have a good understanding of weather, and this will be based largely on frequent observations and recording of weather conditions. It should become second nature for a watchkeeping officer to observe and record the weather, and to learn to compare these observations to the forecasts and weather maps received by the vessel. Learn to make your own forecast based on your observations, don’t remain closed up in the wheelhouse – get out on deck and see what the weather is doing.

All vessels should record weather details in their logbooks – you should be meticulous in noting these observations.

Some vessels are part of the Voluntary Observing Ship (VOS) Scheme, which is an international programme that recruits ships to take, record and transmit weather observations whilst at sea.

If your vessel is part of the scheme, take the opportunity to become familiar with the observing, logging and transmitting of weather information.

**Survey and Documentation**

- Read and study *MLR 10 Vessel Construction & Maintenance MAR049*, Topics 3 and 4 and complete the self test questions
- Reference: AMSA Marine Orders, IMO and ISPS Codes as required for this topic
- Study *Supplementary Notes - Ship Documentation & Survey*
- Ask the Master of your vessel if you can see the ships certificate file. Note down in your journal exactly what certificates your vessel is required to carry, what is covered by those certificates and how long they are valid for. You will need to have a good working knowledge of this when it comes time for your exams.
- Get involved when surveys are being held aboard your vessel. Ask the master if you can take the surveyor around – ask him questions, find out what information he requires and don’t be afraid to ask questions, it is a good opportunity to get firsthand experience of the survey procedure.

- Refer to Marine Orders Part 31 – Ships Surveys and Certification.

**Ship Construction**

- Read and study *MLR 10 Vessel Construction & Maintenance MAR049*
- Read and study *MLR18 Auxiliary Systems*, Sections 1 and 2
- Read and study Chapter 4, 5, 7 and 14 from Van Dokkum, K. *Ship Knowledge. 6th Edition* (2009)

Study of the texts listed above will give useful theoretical knowledge of the construction of the vessel. Now put this theory into practice. Try and examine as many areas of your vessel as possible (take note that many areas will be confined spaces and will need the correct permits and procedures to enter). Ask to accompany the Chief Mate when he is doing his ballast and peak tank inspections; go with the 2nd Engineer into fuel and water tanks when they are opened up for cleaning and maintenance. Ask the Chief Engineer if you can spend some time in the engine room. Take note (draw sketches) of how the engines are supported and the layout of the ships piping and tank systems.

A vessel on the slip or in drydock gives a great opportunity for the structure to be studied in detail. If you are involved with a drydocking, take the opportunity to make drawings and notes of various parts of the ship that may be unavailable in service, for example – cable lockers, double bottoms, shafts, propellers and rudders.

Look at how heavy stress areas are supported and strengthened – around hatches, under machinery, supporting lifting gear.

**Nautical Knowledge**

- Read and study *Supplementary Notes Safe working practices*,
- Read and study *MLR 15 Nautical Knowledge*, Section 1-5
- Read and study Supplementary notes as per the resource list
- House, D.J. *Seamanship Techniques. 3rd edition* (2004), Study Chapters 2-5, 7, 8
- Van Dokkum, K. *Ship Knowledge. 6th Edition* (2009), Read and study Chapters 9, 10, 14, 15
Complete OTAB book PART A Priority Tasks
Complete OTAB book PART B Safety on Board, Survival and Fire Fighting
Complete OTAB Book Part G Ship Operations and Structure (as Indicated block A)
Assignment TDMMB4607A - Apply information of vessel structure to maintenance and seaworthiness (LA013113)

**Nautical Knowledge** is a very wide ranging subject covering many aspects of seamanship. During your studies, you should take every opportunity to be involved with seamanship activities aboard your vessel, such as

**Anchoring** – be part of the anchor party, Note how the windlass is operated and the cable handled. Understand the cable markings and the communications to the bridge. Observe the lead and weight of the cable and report this correctly. Learn how to observe when an anchor is dragging and when it comes aweigh – the officer in charge forward should be able to assist you with this. When you are confident, ask to be in charge, under supervision, of the anchor party.

**Berthing operations** – different ports may require different arrangement of lines, tugs and techniques. Record these in your journal, the information will be useful not just for assignments and exams but later in your career when the same situation arises.

**Rope work** – every vessel, large and small uses rope - you need to be proficient with your knots and splices, it is not enough to simply make them for a practical exam, but be able to use them in your day to day work. Take every opportunity to practice until they become second nature.

**Maintenance** is an important part of a seafarers work. Ask the Chief Officer to be involved with maintenance in as many different areas of the ship as possible, and with as many different types of material and products as possible. Use your journal to record methods and techniques that are different or unique.

**Work aloft or in confined spaces** will need special permits and procedures to be able to be conducted safely. The student should identify these procedures; ask to be part of the team conducting maintenance in these areas if possible to gain experience. Refer to Marine Orders part 61 – Safe Working on Board ships

Different vessels have different types of **cargo handling equipment**. Try and gain as much experience in different types of gear as possible. Try and observe the rigging and operation of cranes, derricks, ramps, hoists etc – make notes and sketches in your journal to relate back to the theory in the texts listed above.
Damage Control

- Read and study *Supplementary Notes - Damage Control*
- Read and study *MLR 11 Stability Ed. 2, Sections 11 and 17*

Damage Control can be a difficult topic to study in practice – hopefully most vessels will avoid damage and all the problems associated with it. Should you find yourself involved with damage control, try and record notes, sketches and photos of the operation, they can be a valuable resource.

Ask the Chief mate to show you the damage control programme on the ships stability computer and study the ships stability book for damage control information.

You need to be completely familiar with the operation of the bilge system – work with the engineers or mate and learn how the bilges are pumped – operation of the pumps and valves.

Few people these days are asked to use a leadline, but should your vessel go aground, it might be need to sound around the hull to determine over what length of the hull the vessel is grounded. Where is the leadline? Learn the markings.

Learn to positions of the sounding pipes for tanks, void spaces and bilges. Learn to take accurate soundings of those spaces under the direction of the Bosun or Mate.

Tanker Operations

- Read and study *MLR 23 Tanker Familiarisation*
- Complete OTAB Book Part J - Tanker Operations

Not all students will have the opportunity to serve aboard a tanker. However, you should be familiar with the basic principles of their operation as set out in the texts above.
Visual Signalling and workplace communications

- Read, study and practice *MLR 20 Visual Signalling Ed. 2*. Read and study all international phonetics, flags and emergency signalling.
- Read and study *MLR 1 Communication* thoroughly.
- Download the free signalling software as given in *MLR 20 Visual Signalling* Ed. 2 and practice sending and receiving morse by light.
- Assignment TDMML307B/E207B – Communication (DK Watchkeeper) (LA013126)

Although modern communications have greatly reduced the need for visual signalling, flags and lights are still in use. You need to practice frequently to become proficient in their use.

Prior to attending BLOCK B

Celestial Navigation

- Read and study *MLR 21 Offshore Navigation*, complete all check your progress questions at the end of each section.
- Complete OTAB book PART F Navigation (Celestial Nav as indicated before block B).
- Assignment 2 TDMMH1607A - Determine position of the vessel - Celestial navigation (LA013122)

Celestial navigation is often neglected by many seafarers who rely almost exclusively on their GPS. Although reliable, satellite systems are not infallible and it is a poorly trained seafarer that has no backup. In addition, proper passage planning identifies a secondary, independent position fixing method for all stages of the voyage, and for ocean passages, celestial observations provides this. In addition, it is not unknown for Port State Control inspectors to ask to see evidence of sights being taken for just that reason, the lack of such evidence being a non-conformity with the ships Safety Management System.

In order to become proficient in taking sights, you need to have plenty of practice. It is one thing to work through a problem in the classroom, quite another to be trying to snatch a sight of a star through broken cloud on the deck of a rolling ship.
The OTAB book specifies a number of sights that you are required to take – use this as a minimum. Whenever you get the opportunity, take observations of the Sun (use the upper and lower limb to gain practice in both), planets, stars and the Moon. Many seafarers will shudder at the thought of observing the Moon, but after you work through Chapter 11 of MLR 21 Offshore Navigation, you will see it is no harder than any other sight. If you voyage to the Northern hemisphere, take the opportunity to observe Polaris for your latitude.

You don’t have to be deep sea to take sights, as long as you have a clear horizon under the body being observe, sights can be taken when coasting as well, indeed this can be valuable if there are no distinct or charted landmarks along a featureless coast to take bearings of.

### Stability

- Read and study MLR 11 Stability thoroughly, complete all check your progress at the end of each section.
- Assignment TDMMA1707A - Determine stability and trim (LA013128)

Stability requires a considerable amount of study to become proficient. Many students will have done stability as part of earlier certificates, unless that was done recently, it is suggested that the early chapters of MLR 11 are worked through as a refresher, before attempting the more in-depth sections.

Many of the example and questions in MLR 11 use the stability book for the vessel “Gulf Glory” The student needs to become familiar with the stability book aboard their own vessel and be able to use it in practice to determine the stability of that vessel. Work with the Chief Officer when the stability and trim of the vessel is determined for different loaded conditions. Most vessels will now have a computer programme that makes calculations quicker and easier. Ask to use this programme – under guidance- many computers will have a trial facility where different conditions of load can be tested. In addition it is recommended that the student attempts manual calculations, following the guidance in the stability book. The same result as the computer programme should be achieved. Ask the Mate or Master for assistance if required.

Use some simulated cargo loadings to try and determine the safe limits of your vessel – what are the maximum weights in different holds, how do free surface of ballast tanks affect the stability etc.

Examine case studies carefully (many are given in the MLR) as these give practical examples of when stability goes wrong.
Cargo Operations

- Read and study *MLR 24 Cargo Operations* thoroughly
- Read and study the relevant AMSA Marine Orders as given. There are a number of Marine Orders relating directly to cargo and cargo handling, some of them to specialized vessels. The student will need to be familiar with these, especially as they apply to the ships served in. In particular;
  - MO Part 32 – Cargo Handling Equipment
  - MO part 33 – Cargo and Cargo handling – Grain
  - MO Part 34 – Solid Bulk Cargoes
  - MO part 41 – Carriage of Dangerous Goods
  - MO part 42 – Cargo Stowage and Securing
  - MO part 43 – Cargo and Cargo handling – Livestock
- Roberts. *Watchkeeping Safety and Cargo Management in Port*. Nautical Institute, 1st edition 1995, Chapters 2, 7, 8, 9, 10, 12, 13, 17 and 18
- House, D.J. *Seamanship Techniques*. 3rd edition (2004); Chapters 4, 5 and 6
- Van Dokkum, K. *Ship Knowledge*. 6th Edition (2009), Chapters 1, 2, 8 and 9
- Complete OTAB book PART G Ship Operations and Structure (as Indicated block B)
- Complete OTAB tasks PART D Cargo Operations
- Assignment TDMMA707B/ A807B - Cargo work (LA013132)

You need to be involved with the cargo operations aboard your vessel – ask to work with the Mate to assist planning the loading and discharge. Make notes about unusual or awkward stows – how were they handled and securing. You need to be familiar with the ship’s cargo securing manual and be familiar with the operation of cargo handling and lifting gear. Ask the mate to see the Lifting Gear Register and understand the various inspections, tests and examinations that take place, and the entries that are made in the register.

Draw cargo stowage plans for the various ships you serve in and keep them for reference.

Whenever possible, try and gain experience with cargo types other than the ones carried in your ship. Observe handling techniques and equipment, take notes and photographs.
Bridge Equipment and Electronic Navigation

- Read and study MLR 14 Bridge Resources & Equipment
- Read and study MLR 13 Radar
  
  Complete all the self test questions at the end of each section.


- You may reference other books as per the book list in relation to bridge equipment and electronic navigation from the TAFE library

- Complete OTAB book PART E Bridge Equipment
- Assignment TDMMH507B - Use radar and other bridge equipment to maintain safe navigation (LA013134).

A Bridge Watchkeeping Officer is expected to understand the operation of all the equipment found on a bridge, and a modern ship has a wide variety of equipment. As you work through each chapter of *MLR 14 Bridge Resources & Equipment*, examine the equipment found on your bridge. Read the operation manuals – there will be a lot of them, but it is important to fully understand the operation of the equipment.

Radar and Arpa is such an important part of a modern bridge, that they have their own teaching resource – *MLR 13 Radar*. You need to fully understand the operation of radar, including its limitations. There is no substitute for plenty of practice when it comes to radar plotting. Do plenty of manual plots – do not rely on the Arpa, you will be tested on plotting techniques in exams. Include relative and true motion plots in your practice; you may be examined on both.

The Collision Regulations require the proper use of radar and radar plotting – make sure you understand all the controls on your radar, and do not neglect the performance monitor and the logging of performance data.

Modern radars are increasingly integrated with other equipment – AIS, ECS and so on. The Watchkeeper must fully understand how these integrations affect the various instrument displays.

Many seafarers will have progressed through their career and studies using paper charts, and the majority of ships still use them extensively. Electronic charts and plotters are becoming more commonplace and mandatory carriage of ECDIS is on the way. You must take every opportunity to become proficient with the use of electronic chart systems, without neglecting the basics of ordinary chart work.

With the plethora of electronic equipment found on the bridge of a modern ship, there is a trend to view the magnetic compass as somewhat irrelevant. As an instrument that is totally independent of any power supply, its value as a backup should be obvious and the watchkeeper should not neglect to take frequent compass errors and understand the deviations and corrections of the compass. Smaller vessels may only have a magnetic compass.

Go up onto the monkey island – take the cover off the compass and have a
look. Note the correctors – where are the magnets located, how is the heeling error bucket adjusted, what length is the Flinders bar and how far are the soft iron spheres out from the compass. When was the last correction done? Ask the Master if there is any opportunity to conduct a compass swing and prepare your own table of deviations.

**Engineering Knowledge**

- Read and study *MLR 17 Main Propulsion Systems*
- Read and study *MLR 18 Auxiliary Systems*
- Read and study *MLR 19 Mathematics*
- Van Dokkum, K. *Ship Knowledge*. 6th Edition (2009); Chapter 11, 12 and 13. Read and study well
- Complete OTAB book PART K Engineering Knowledge

It is important for the bridge watchkeeper to understand the basics of Engine room operations. What is the response of the main engine to the telegraph – this will affect the shiphandling characteristics of the vessel. Similarly, the steering gear must be understood – what maximum rudder angle is available, what type of steering gear does your vessel have and what are the emergency steering arrangements.

Deck watchkeepers are involved with ballast pumping operation during the loading and unloading of ships. The student should gain an understanding of the pumping systems aboard their vessel – work with the engineers to gain experience with pumps and valves.

The operation of emergency generators and emergency fire pumps need to be understood thoroughly, the student should accompany the engineers when checks and tests on these units are done.
Prior to attending BLOCK C

Ship Administration and Business

- Read and study *MLR 7 Maritime Regulations and Legislation*,
- Read and study *MLR 14 Bridge Resources & Equipment* - (chapter 19)
- Read and study *MLR 24 Cargo Operations*.
- Read and study the *Supplementary Notes - Ship Business and Administration*.

- Assignment TDMML507A - Manage business and ship administration (LA013144)

For this subject, the student should ask the Master for access to the documents pertaining to Ships Administration.

Official Log Book and Articles – look through these and see what information is required. What documentation is required for the crew to sign on?

Cargo documents – examine Bills of Lading, Mates Receipts, Charter Party documents. Make notes regarding the information contained in them, especially any clauses.

What P&I club does your vessel belong to? These clubs will often send out information relevant to the ships operation – ask to read through them.

Part of your induction to the ship should include the Safety Management System. You should become completely familiar with this document and how it affects your role on board. A Port State Control Inspector could ask you questions on the SMS during an inspection and it is a common topic in exams and assignments, so you need to know the system thoroughly. Often it is a computer based system on modern ships, follow the on-board tutorials and ask the master for assistance if you need any points clarified. Refer to Marine Orders Part 58 – International Safety Management Code for additional information.
Bridge Resource Management

- Read and study *MLR 14 Bridge Resources & Equipment*, chapter 18 and the supplementary notes as provided
- Reference should be made to the ‘Bridge Team Management’ book by Capt A Swift and the ‘Bridge Procedures Guide’ by ICOS

During your studies, observe and make notes on the team work on the bridge of your ship. Are the communications a “closed loop” system, is there a “challenge and response” culture aboard. How does the bridge work when a pilot is embarked?

Take note of the various operational checklists used for bridge operations, and what roles are performed by the various members of the bridge team. Your studies will include being part of a Bridge team in a simulator environment; you need to be able to compare this to real life situations in order to apply the principles learned.

Not all bridge teams are the same – a large cruise ship with numerous watchkeeping officers will operate differently to a small coaster with perhaps only Master and a mate aboard. How do the principles of BRM apply in each.

Read through the case studies provided in your learning material and refer them to your vessel – have the lessons been learned?

Bridge Watchkeeping

Read and study relevant notes on bridge watch-keeping duties in the following:

- *MLR 8 Collision Regulations and Buoyage*,
- *MLR 13 Radar*,
- *MLR 14 (chapter 17) and 23. COLREGS is an important part of watchkeeping duties.*
- Marine Orders Part 30 – Prevention of Collisions will always have the most up to date version of any amendments to the COLREGS.
- Read and study the *Supplementary Notes NI 'Bridge Watchkeeping'*.  
- House, D.J. *Seamanship Techniques*. 3rd edition (2004); Read and study chapter 10, 13-16
- Reference should be made to the *Bridge Procedures Guide*, IMO and all relevant AMSA Marine Orders
Assignment TDMMF3007B - Maintain a safe navigational watch (LA013137)

Complete OTAB book PART C Watch-keeping

Watchkeeping will be one of your major responsibilities. Through your studies, you need to take the opportunity to gain as much experience as possible. Use the timetable given in your OTAB book as a minimum, the more experience you gain on the bridge, the better watchkeeper you will be. Try and gain experience in various traffic situations, conditions of visibility and navigational situations. If you spend all of your understudy period on watch on a deep sea passage with not a ship in sight, you will not gain much valuable experience.

Take note of the various operational checklists that apply to the watchkeeper, various examples are given in your study material, but every ship will have its own unique systems and checklists.

In addition to the texts listed above, you will need to have a thorough understanding of Marine Orders Part 21 – Safety of Navigation and Emergency Procedures.

As well as the obvious need to correctly apply the Collision Regulations while on watch on the bridge, you will be asked in depth questions on the COLREGS in assignments, written exams and oral exams. There is no substitute for detailed study of the regulations, you must know all parts and while verbatim reciting of the rules is not required, it is expected that the student would be able to quote important parts. Use all available resources – flash cards, on line tutorials, textbooks, etc. Ask the Master or Mate to test you on various rules; most officers will appreciate the refresher that this will give them in the Rules.

Command Navigation and Ship Control

- Read and study the supplementary notes as provided. Read MLR 9
- D. J. House, Command Navigation; Chapters 6, 7, 8 and 9
- House, D.J. Seamanship Techniques. 3rd edition (2004); Chapters 17, 18
- Van Dokkum, K. Ship Knowledge. 6th Edition (2009); Chapters 5, 12
- Assignment TDMMC307B - Manoeuvre and handle a vessel (LA013140)

In Block C, you will gain useful experience in ship handling and control on the simulator. While this will be valuable, nothing can replace experience in the real thing. Take every opportunity of you time at sea to observe manoeuvres – anchoring, berthing, pilotage etc. Make notes and sketches; describe how the master or pilot uses helm and engines to make various manoeuvres. If possible, ask the Master if you can be part of the bridge team for some manoeuvres, handling the telegraphs or helm will help you.
understand how the ship is handled. Take note of the pilot/master information exchange, the planning that goes on to achieve safe ship handling.

Note how wind and tide affects manoeuvres; make sketches of various berths and the approaches for future reference.

As you can experience, it may be possible to get some direct ship handling experience, ask the master if you can take the ship, under supervision, to or from and anchorage, or to a pilot boarding position.

Take notes about your ship’s handling characteristics – turning circles and stopping distances, effect of transverse thrust, windage, engine power and response, thruster/s capability etc.

Note how tugs are used for various berthings – are they used on long lines or alongside. How many tugs and where placed. How does the placing of these tugs correlate to the pivot point of the ship.

Refer to marine Orders Part 56 – Reefrep, and Part 63 – Ausrep, for guidance in those reporting systems.

Manage Operations and Maintenance

- Read and study MLR 10 Vessel Construction & Maintenance MAR049, do the self test questions at the end of each section
- Roberts. Watchkeeping Safety and Cargo Management in Port. Nautical Institute, 1st edition 1995; Chapters 3, 4, 14-16 and 19
- Assignment TDMMB4807A - Operations and maintenance on vessels (LA013142)
- Complete OTAB book PART I Dry-docking Procedures

Whenever a shipboard operation that is out of the ordinary is taking place, the student should endeavour to make notes and sketches of this operation. This may include dry docking, salvage, towing, heavy lifts, oil pollution incidents etc. Pollution prevention is covered by a number of marine Orders, which the student is advised to read through;

Part 91 – Marine Pollution Prevention – Oil
Part 93 – Marine Pollution prevention – Noxious Liquid Substance
Part 94 – Marine Pollution Prevention – Packaged Harmful Substances
Part 95 – Marine Pollution Prevention – Garbage
Part 96 - Marine pollution Prevention – Sewage
Part 97 - Marine Pollution Prevention – Air Pollution.

Dry-docking in particular requires careful planning and management of numerous activities. If the student is involved with a dry-docking in their ship, ask to see the planning work lists and procedures. Study docking plans and carefully note the procedure for entering and leaving the dock. It is a good opportunity to study parts of the ship not normally accessible, take this opportunity to make sketches or take photos to supplement your notes.

The student needs to gain a thorough understanding of the vessel’s planned maintenance system – this is part of the ship’s SMS. Work with the mate or Chief Engineer to gain an understanding of the operation of a PMS. Is it computer or paper based? Who enters the work details and how do the various jobs get allocated. Is it linked to a stores ordering/stock control system.