

## TRAU6002: Post-Injury Critical Care

Online

Semester 1 - 2024



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

## OVERVIEW

<b>Course Description</b>	The course discusses the current intensive care management of trauma-related critically ill patients. It will bring up-to-date information and evidence-based practice in the field of shock resuscitation, fluid replacement targets and management, organ dysfunction and other miscellaneous topics.
<b>Academic Progress Requirements</b>	Nil
<b>Assumed Knowledge</b>	Students will need to have basic physiopathology and pharmacological knowledge.
<b>Contact Hours</b>	<b>Online</b> <b>Online Activity</b> Online 10 hour(s) per week(s) for 13 week(s) starting Week 1
<b>Unit Weighting Workload</b>	10 Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

# COURSE OUTLINE

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# CONTACTS

<b>Course Coordinator</b>	<b>Online</b> Dr Jorge Brieva Jorge.Brieva@newcastle.edu.au 02-49214241
<b>Teaching Staff</b>	Other teaching staff will be advised on the course Canvas site.
<b>School Office</b>	<b>School of Medicine and Public Health</b> smph@newcastle.edu.au +61 2 4921 6852

# SYLLABUS

<b>Course Content</b>	<ul style="list-style-type: none"><li>• <b>Shock &amp; Fluid Resuscitation in Trauma</b></li><li>• Type of IV fluids</li><li>• Physiological goals of resuscitation</li><li>• <b>Vasoactive drugs &amp; Cardiovascular support</b></li><li>• Mechanism of action &amp; Indications</li><li>• <b>Inflammation in Trauma</b></li><li>• Pathophysiological changes</li><li>• Therapeutic implications</li><li>• <b>ARDS</b></li><li>• Pathophysiology</li><li>• Management</li><li>• <b>Cardiac Trauma</b></li><li>• Diagnosis &amp; Management</li><li>• <b>Acute Kidney Injury in Trauma</b></li><li>• Pathophysiological changes &amp; management</li><li>• <b>Traumatic Brain Injury</b></li><li>• Pathophysiological changes</li><li>• Multimodal monitoring &amp; management</li><li>• <b>Sepsis</b></li><li>• Pathophysiological changes &amp; management</li><li>• <b>Blood Transfusions</b></li><li>• Indications, physiology &amp; evidence</li><li>• <b>Hospital acquired infections</b></li><li>• Surveillance &amp; Control</li><li>• Surgical prophylaxis, MRO, VAP, CLABSI, SDD</li><li>• <b>DVT &amp; Pulmonary Embolism in Trauma</b></li><li>• Diagnosis &amp; Management</li><li>• <b>Nutrition</b></li><li>• Indications, physiology &amp; evidence</li><li>• <b>EOL &amp; Organ Donation</b></li></ul> <p><b><i>Further to the coursework, you will be required to attend an intensive three-day face to face interactive workshop.</i></b></p>
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<b>Course Learning Outcomes</b>	<p><b>On successful completion of this course, students will be able to:</b></p> <ol style="list-style-type: none"><li>1. Define and analyse current strategies for cardiovascular, respiratory, neurological and renal support in the area of critical care illness;</li><li>2. Identify supportive measures in the post trauma patient including transfusional therapies, deep venous thrombosis prophylaxis, infection prevention and early physiotherapy; and</li><li>3. Demonstrate understanding of the management of the patient at the end of life, prognostication, death and organ donation.</li></ol>
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## Course Materials

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# COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

**Contact Hour Requirements:**

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**Course Assessment Requirements:**

- Assessment 1 - Discussion Board: Submit assessment item -
- Assessment 2 - Multiple Choice Quiz: Part 1: Submit assessment item
- Assessment 3 - Multiple Choice Quiz: Part 2: Submit assessment item -
- Assessment 4 - Multiple Choice Quiz: Part 3: Submit assessment item -
- Assessment 5 - Multiple Choice Quiz: Part 4: Submit assessment item -
- Assessment 6 - Paper Upload and Summary: Submit assessment item -

If during the course, an MCQ assessment is not submitted, and an 'Adverse Circumstance' exemption/exception is not granted, the student must complete the other test in order to reach the final grading.

The discussion board and paper/research presentation during the residential must be completed.

# ASSESSMENTS

This course has 6 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Discussion Board*	See Canvas	Individual	19%	1, 2, 3
2	Multiple Choice Quiz: Part 1*	See Canvas	Individual	19%	1, 2, 3
3	Multiple Choice Quiz: Part 2*	See Canvas	Individual	19%	1, 2, 3
4	Multiple Choice Quiz: Part 3*	See Canvas	Individual	19%	1, 2, 3
5	Multiple Choice Quiz: Part 4*	See Canvas	Individual	19%	1, 2, 3
6	Paper Upload and Summary*	See Canvas	Individual	5%	1, 2, 3

\* This assessment has a compulsory requirement.

## Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

## Assessment 1 - Discussion Board

<b>Assessment Type</b>	Participation
<b>Weighting</b>	19%
<b>Due Date</b>	See Canvas
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

## Assessment 2 - Multiple Choice Quiz: Part 1

<b>Assessment Type</b>	Quiz
<b>Weighting</b>	19%
<b>Due Date</b>	See Canvas
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

## Assessment 3 - Multiple Choice Quiz: Part 2

<b>Assessment Type</b>	Quiz
<b>Weighting</b>	19%
<b>Due Date</b>	See Canvas
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

## Assessment 4 - Multiple Choice Quiz: Part 3

<b>Assessment Type</b>	Quiz
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<b>Weighting</b>	19%
<b>Due Date</b>	See Canvas
<b>Opportunity to Rettempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

### **Assessment 5 - Multiple Choice Quiz: Part 4**

<b>Assessment Type</b>	Quiz
<b>Weighting</b>	19%
<b>Due Date</b>	See Canvas
<b>Opportunity to Rettempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

### **Assessment 6 - Paper Upload and Summary**

<b>Assessment Type</b>	Written Assignment
<b>Weighting</b>	5%
<b>Due Date</b>	See Canvas
<b>Opportunity to Rettempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

# ADDITIONAL INFORMATION

## Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

\*Skills are those identified for the purposes of assessment task(s).

## Communication Methods

Communication methods used in this course include:

## Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

## Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the [Oral Examination \(viva\) Procedure](#). In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the [Student Conduct Rule](#).

## Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

Please note Artificial Intelligence (AI) is not to be used to complete assessments in TRAU6002.

Use of AI is permitted as outlined here <https://libguides.newcastle.edu.au/AI-tools/uni>.

## Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or

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2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
  3. you are requesting a change of placement; or
  4. the course has a compulsory attendance requirement.
- Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:  
<https://policies.newcastle.edu.au/document/view-current.php?id=236>

**Important Policy Information**

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at <https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures> that support a safe and respectful environment at the University.

*This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.*

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