School	**SCHOOL OF MEDICINE**
Subject Code and Name	**MEDI3006 – Applied Clinical Sciences 1**
Subject Coordinator	**Scott MacKenzie**
Teaching Session Details	**Yearlong 1H and 2H 2023**
Handbook Summary	Applied Clinical Sciences 1 is the first major clinical year of the MD program. It consists of 10 weeks each in Surgery and Medicine, and 5 weeks in Critical Care, Medicine in Context (MiC) and MD Project. Surgery, Medicine and Critical Care attachments will be at Campbelltown, Blacktown, Mt Druitt, Bankstown, Fairfield and Liverpool hospitals. In Surgery and Medicine students spend 5 weeks in each of two sub-specialties. In Critical Care students spend time in Emergency and Anaesthetics Departments. The MiC attachment involves community-based aspects of the health care system including community organisations and general practice. In the MD Project attachment students will have 5 weeks to work under supervision on their allocated project. Students also have 3 Conference Weeks; tutorials in clinical communication skills; and undertake three online Scientific Streams learning modules.
Subject Level	3
Credit Points	80
Assumed Knowledge	None
Pre-Requisites	MEDI2003/MEDI2002 Clinical Sciences 2/Foundations of Medicine 2
Co-Requisites	Please refer to Subject Enrolment Restrictions
Enrolment Restrictions	Students must be enrolled in 4758 Doctor of Medicine Students are also expected to meet the inherent requirements of the program as outlined in the Western Sydney University Inherent Requirements for Medicine Programs: https://www.westernsydney.edu.au/ir/inherent_requirements/inherent_requirements_for_medicine_courses Inherent requirements are the fundamental components of a Course or Subject, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Program or Subject, while preserving the academic integrity of the university's learning assessment and

accreditation processes. The Disability Education Standard, Section 3.4 (3) states:
"In assessing whether an adjustment to the Course, Subject of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award."

Special Requirements- Legislative pre-requisites	Prior to enrolling in this subject, students must have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Subject and failure to attend will result in a Fail Grade of the subject. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement NSW Health Student Compliance Information
Special Requirements- Essential Equipment	Students are required to have Stethoscope, Pencil Torch and Watch with a second hand or display.
Subject incompatible with and not to be counted for credit with	Not Applicable
Attendance Requirements	Attendance is required for accreditation of the MD program by the Australian Medical Council (AMC) as outlined in the AMC "Accreditation Standards for Primary Medical Education Providers and their Program of Study and Graduate Outcome Statements" section 4.3 and 4.4 which states: 4.3. The medical program enables students to develop core skills before they use these skills in a clinical setting. 4.4. Students have sufficient supervised involvement with patients to develop their clinical skills to be required level and with an increasing level of participation in clinical care as they proceed through the medical program.
Subject Content	1. 3 Conference Weeks – these maybe delivered online 2. 10 weeks of Surgery in two hospital attachments 3. 10 weeks of Medicine in two hospital attachments

4. 5 weeks of Critical Care in one hospital attachment
5. 5 weeks of Medicine in Context Advanced (MiCa) in community-based attachment
6. 5 weeks of MD Project (MDP)
7. 3 Scientific Streams online learning packages (25 hours each)

Learning Outcomes

As years 3-5 of the MD program are an integrated whole and students will undertake various aspects of the clinical and community programs asynchronously in any of the three years, it is not possible to divide the learning outcomes on a year by year basis. However, each of the attachments will have their own learning outcomes which will be made explicit to students in Attachment Descriptors. The overall subject learning outcomes are presented below. On successful completion of the MD program, students should be able to:

#	Program Learning Outcomes
1	**Patient Care: Communication** Provides patient centred care as a member of an interdisciplinary team under appropriate supervision. **1.1 -** Communicates empathically and effectively with patients, families and health care team members to interact, negotiate, learn and foster understanding. **1.2 -** Establishes trusting relationships and communicates sensitively, empathically and effectively, without prejudice, with individuals and families from diverse backgrounds. **1.3 -** Creates and manages communication and information in all media, for example orally, in writing, electronically, by telephone.
2	**Patient Care: Patient Assessment** Provides patient centred care as a member of an interdisciplinary team under appropriate supervision. **2.1 -** Assesses patient health needs, attending to physical, functional, social, cultural and psychological factors. **2.2 -** Gathers a relevant and comprehensive patient history, generating and testing differential diagnoses **2.3 -** Performs an accurate and appropriate clinical examination, testing & refining differential diagnoses **2.4 -** Synthesises clinical findings to develop prioritised differential diagnoses and a comprehensive problem list **2.5 -** Selects, justifies and interprets investigations to evaluate likely diagnoses.
3	**Patient Care: Patient Management** Provides patient centred care as a member of an interdisciplinary team under appropriate supervision. Develops, implements and monitors a management plan through a process of shared decision making which addresses the patient's unique medical, psychological and social needs and preferences: **3.1 -** Formulates and implements (under supervision) a comprehensive management plan. **3.2 -** Ensures that management addresses the patient's unique psycho-social, functional & cultural needs and preferences. **3.3 -** Explores the role of integrative and complementary therapies utilised by patients for their health care. **3.4 -** Monitors the effectiveness of management and provides continuity of care throughout the duration of clinical responsibility.

	3.5 - Makes timely, informed and rational decisions in circumstances of uncertainty according to best practice. **3.6 -** Performs an appropriate range of technical and practical procedures safely and effectively. **3.7 -** Prescribes and administers an appropriate range of medications and other therapeutic agents safely and effectively. **3.8 -** Recognises, assesses, initiates management and seeks assistance for deteriorating and critically unwell patients who require immediate care.
4	**Health in the Community: Determinants of Health & Illness** Promotes the health and wellbeing of individuals and populations, with particular focus on Greater Western Sydney, rural, regional and Aboriginal and Torres Strait Islander Australia. **4.1 -** Evaluates the determinants of health and illness in populations. **4.2 -** Explains how health inequities arise from the interplay of biological, socio-economic, behavioural, sociocultural and environmental factors. **4.3 -** Discusses and evaluates the major issues and trends confronting global health, their determinants and effects on individuals and populations.
5	**Health in the Community: Health Needs** Promotes the health and wellbeing of individuals and populations, with particular focus on Greater Western Sydney, rural, regional and Aboriginal and Torres Strait Islander Australia. **5.1 -** Analyses the health needs and priorities of communities and populations, taking into consideration the historical, cultural, social and political forces which impact on health and wellbeing. **5.2 -** Evaluates a range of strategies, including patient and population-oriented approaches, for illness prevention and management, and health promotion. **5.3 -** Demonstrates culturally sensitive communication and effective engagement with diverse communities and populations.
6	**Health in the Community: Health Care Systems** Promotes the health and wellbeing of individuals and populations, with particular focus on Greater Western Sydney, rural, regional and Aboriginal and Torres Strait Islander Australia. **6.1 -** Explains the roles of health agencies, services and providers and how they interact to provide health care to individuals and populations. **6.2 -** Evaluates the effectiveness of health care systems and services in addressing individual and population needs and priorities
7	**Health in the Community: Health Promotion** Promotes the health and wellbeing of individuals and populations, with particular focus on Greater Western Sydney, rural, regional and Aboriginal and Torres Strait Islander Australia. **7.1 -** Promotes the health and well-being of individual patients and populations within the context of the culture, health status and health needs of the community of which that patient is a member. **7.2 -** Articulates the role of advocacy and public policy in promoting and protecting health and preventing disease.
8	**Health in the Community: Aboriginal Health** Promotes the health and wellbeing of individuals and populations, with particular focus on Greater Western Sydney, rural, regional and Aboriginal and Torres Strait Islander Australia. **8.1 -** Explains how various factors, including historical, cultural and political, interact to influence the health of the Aboriginal and Torres Strait Islander peoples
9	**Personal and Professional Development: Ethical Practice** Demonstrates and develops professional skills, responsibilities and attitudes. **9.1** - Aware of and adheres to accepted medical professional codes of conduct. **9.2** - Applies ethical principles in professional practice. **9.3** - Displays and reflects on, appropriate professional attitudes and values. **9.4** - Values patient autonomy, privacy and confidentiality. **9.5** - Aware of and complies with legal responsibilities and requirements, and the guidelines of regulatory bodies. **9.6** - Maximises patient safety, ensures quality care, and manages risk and adverse medical outcomes

10	**Personal and Professional Development: Teamwork** Demonstrates and develops professional skills, responsibilities and attitudes. **10.1** - Works effectively and cooperatively as a member of a multidisciplinary team and as a member of the health care system.
11	**Personal and Professional Development: Learning and Teaching** Demonstrates and develops professional skills, responsibilities and attitudes. **11.1** – Engages in self and peer evaluation, lifelong learning and teaching.
12	**Personal and Professional Development: Personal Needs** Demonstrates and develops professional skills, responsibilities and attitudes. **12.1** – Recognises own personal, physical and emotional needs and is aware of the pathways available for assistance.
13	**Personal and Professional Development: Medical Humanities** Demonstrates and develops professional skills, responsibilities and attitudes. **13.1** – Engages in scholarship of the arts and humanities to interpret the diverse human experience of health, illness and medical care.
14	**Scientific Basis of Medicine: Applies Science to Practice** Develops and applies a sound understanding of the scientific foundations (social, basic and clinical) of medical practice. **14.1** - Applies an understanding of the social and biomedical sciences to the assessment and management of the health needs of individuals and populations: **14.2** - Demonstrates an understanding of the body as a complex adaptive biological system. **14.3** - Applies an understanding of the basic, social and clinical sciences to clinical reasoning. **14.4** - Explains the underlying mechanisms of health problems. **14.5** - Explains the underlying mechanisms of investigative and therapeutic measures, including emerging technologies. **14.6** - Applies an understanding of the psychological and social sciences to interpret health and illness within a social and cultural context.
15	**Scientific Basis of Medicine: Uses Evidence** Develops and applies a sound understanding of the scientific foundations (social, basic and clinical) of medical practice. **15.1 -** Seeks, critically appraises and applies best available evidence relevant to health and illness in individuals and populations.
16	**Scientific Basis of Medicine: Research** Develops and applies a sound understanding of the scientific foundations (social, basic and clinical) of medical practice. 16.1 - Takes opportunities to engage in research and scientific endeavor. 16.2 - Applies an understanding of research rigor by formulating answerable research questions, selecting appropriate study designs, synthesising, critically analysing and disseminating research findings. 16.3 - Applies an understanding of ethical principles, and relevant guidelines and laws, to the conduct of research.

Subject Name: Applied Clinical Sciences 1   Subject Code: MEDI3006   Teaching Session: 1H 2023 Day

	Assessment Item	Type of Assessment	Length/ Duration	Group (G)/ Individual (I)	Subject Learning Outcomes	Percentage	*Threshold Y/N (see c)
1	**Medicine Attachment**	**Medicine Attachment makes up 12% of Overall subject grade**			**1-4**	**12%**	**Y**
1a	Clinical Attachment Assessments (CAA) x 2	Professional Placement Performance		I	1-4	100% of attachment	Y
2	**Surgery Attachment**	**Surgery Attachment makes up 12% of Overall subject grade**			**1-4**	**12%**	**Y**
2a	Clinical Attachment Assessments (CAA) x 2	Professional Placement Performance		I	1-4	100% of attachment	Y
3	**Critical Care Attachment**	**Critical Care Attachment makes up 6% of Overall subject grade**			**1-4**	**6%**	**Y**
3a	Clinical Attachment Assessments (CAA)	Professional Placement Performance		I	1-4	100% of attachment	Y
4	**MiC Advanced Attachment**	**MiCa Attachment makes up 10% of Overall subject grade**			**1-4**	**10%**	**Y**
4a	Community Assessments	See sub-components 4a-1, 4a-2 and 4a-3					Y
4a-1	Community Placement Assessment	Professional Placement Performance		I	1-4	30% of Attachment	N
4a-2	Tutorial Assessment	Participation	Weekly	I	1-4	10% of Attachment	N
4a-3	Essay	Written Assessment	1000-1500 words	I	1-4	20% of Attachment	N
4b	GP Assessments	See sub-components 4b-1 and 4b-2					Y
4b-1	GP Clinical Attachment Assessment (CAA)	Professional Placement Performance		I	1-4	20% of Attachment	N
4b-2	Mini-CEX (x2)	Professional Task	30 minutes each	I	1-4	20% of Attachment (10% each)	N

Assessment Item		Type of Assessment	Length/ Duration	Group (G)/ Individual (I)	Subject Learning Outcomes	Percentage		*Threshold Y/N (see c)
5	**MD Project**	**MD Project makes up 10% of Overall subject grade**			**1-4**	**10%**		**Y**
5a	Learning Plan	Written Assessment	MyProgress form, MDP Showcase	I	1-4	N/A		Y
5b	Progress Report and Interview	Written Assessment, Performance and Participation Assessment	MyProgress form, MDP Showcase	I	1-4	30% (Supervisor assessment)		Y
5c	Critical Literature Review	Written Assessment	1000-1500 words	I	1-4	70%		Y
6	**Scientific Streams**	Quiz On-line completion	75 hours	I	1-4	S/U		Y
7	**Paper A: SAQ/MEQ**	Final Exam – Short Answer and Modified Essay Questions	2 hours	I	1-4	15%	30%	Y**
	Paper B: MCQ	Final Exam - Multiple Choice Questions	2 hours	I	1-4	15%		
8	**Clinical Skills Examination**	Professional Task Objective Structured Clinical Assessment (OSCE) or equivalent	1 hour 20 mins	I	1-4	20%		Y
9	**Long case**	Presentation Oral case presentation and discussion with examiner	1 hour 20 min	I	1-4	S/U		Y
10	**MD Portfolio**							
10a	Advisor Meetings	Attendance, presentation and participation	3 meetings	I	1-4	S/U		Y
10b	End of year portfolio task submitted via Myshowcase	3 x advisor meeting presentations and feedback, & written reflection	Myshowcase Task.	I	1-4	S/U		Y
12	**Attendance**	Professional Task	Year Long	I	1-4	S/U		Y
13	**Professionalism**	Professional Task	Year Long	I	1-4	S/U		Y

*Threshold: Threshold assessments are compulsory requirements within Applied Clinical Sciences 1 that must be met in order to pass the subject. They include mastering professional skills and / or attainment of required professional attributes and are non-graded. Failure to satisfactorily complete a threshold requirement will result in a fail grade for the subject.

To be awarded a passing grade in ACS1, students must achieve an aggregate score of 50% or higher (after standard setting has been applied) in the assessments outlined in the table above and satisfactorily complete all the thresholds. In addition, students must:

- **Have attained an aggregate mark of 50% or higher (after standard setting has been applied) in Papers A – B.
- Have attained a mark of 50% or higher (after standard setting has been applied) in the OSCE or equivalent. An equivalent examination could be the Structured Online Viva (StOVi) used in 2020. Students who fail to achieve 50% in the OSCE or equivalent will be required to complete a remediation program, followed by a supplementary OSCE or equivalent. Students must achieve an average mark of 50% or higher (after standard setting has been applied) in order to pass the supplementary OSCE or equivalent. If a student passes the supplementary OSCE or equivalent, the final mark for the OSCE or equivalent will be recorded as 50%. If a student fails the supplementary OSCE or equivalent, they will receive a Fail grade for ACS1.
- Have attained satisfactory or above satisfactory grade for each 5-week Medicine, Surgery and Critical Care attachment. Borderline will require discussion with Clinical Dean and Year co-ordinator If a student fails an attachment, they will be given one opportunity to remediate the attachment as prescribed by the Head of Discipline. If the student passes the remediation, the maximum mark that will be awarded for the attachment is 50%. If a student fails the remediation, they will receive a Fail grade for ACS1.
- Have attained a mark of 50% or higher for MD Project assessment tasks. If a student fails a written task they will be given one opportunity to revise and resubmit. If a student submits a task after the deadline without prior approval from the MDP team, they will not be provided an opportunity to resubmit a Not Yet Satisfactory task. If the student passes the resubmission, the maximum mark that will be awarded for the task is 50%. If a student fails a progress assessment, a remediation plan will be devised by the Stream Lead in collaboration with the student and the supervisor. If a student fails resubmission of written tasks or fails progress remediation, they will fail the MD Project attachment A and receive a fail grade for ACS1.
- Have attained a mark of 50% or higher in both components of the MiC attachment assessments (Community Assessments and GP Assessments). If a student fails one or both MiC component/s, they will be given one opportunity to undertake a Supplementary Task for the failed component/s. The nature of the Supplementary Task will be determined by the MiC Convenor (for the Community Assessments fail) and the MiC GP Academic (for the GP Assessments fail). The maximum component mark after the supplementary task is 50%. If the Supplementary Task/s is Unsatisfactory, the student fails the MiC Attachment and may be offered one opportunity for remediation. The nature of the remediation will be determined by the MiC Convenor. The Maximum grade that can be awarded for the MiC Attachment after remediation is 50%. If a student fails the remediation, they will receive a Fail grade for ACS1.
- Have not failed two or more attachments in ACS1. If a student fails two or more attachments, on their first attempt, they will receive a Fail grade for ACS1.
- Have completed the Scientific Streams at a satisfactory level in the designated timeframe. Students with unsatisfactory participation or more than two warnings for late submission of work will be given one chance at remediation by the Scientific Stream coordinator. Failure to satisfactorily complete the remediation task for the Scientific Streams will result in an 'Unsatisfactory' grade being given for this threshold assessment, resulting in Fail grade for the subject.
- Have attended, presented and participated in three meetings with Portfolio Advisor and obtained a satisfactory grade for third advisor meeting. Remediation will be determined for explained absences, unexplained absences will receive a Fail grade for ACS1. Portfolio Myshowcase Task submitted on time, complete and to a satisfactory standard. One attempt at remediation offered if submitted task unsatisfactory. If student fails the remediation, they will receive a Fail grade for ACS1.

- Have met the attendance requirements as outlined in the School of Medicine Attendance Policy for Clinical Years available on the 2023 Subject Hub on vUWS.
- Code of Professional Conduct for Medical Students of Western Sydney University (available on the Course Hub)
- Western Sydney University Student Code of Conduct Policy https://policies.westernsydney.edu.au/document/view.current.php?id=258
- Western Sydney University Student Misconduct Rule https://policies.westernsydney.edu.au/document/view.current.php?id=304
- NSW Ministry of Health https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2015_049.pdf
- The Australian Health Professional Regulation Authority "Good Medical Practice" http://www.medicalboard.gov.au/documents/default.aspx?record=WD10%2F1277&dbid=AP&chksum=eNjZ0Z %2FajN7oxjvHXDRQnQ%3D%3D

Failure to uphold these inherent requirements and professional standards may result in the student being awarded a Fail grade for the subject.

j) If a student withdraws from the subject prior to the session 1H census date no academic penalty is imposed, and no grade is recorded on the student's academic transcript. If a student withdraws from the subject during session 1H, after the census date, they will receive an 'E' grade (Fail Discontinued) on their academic transcript. The last date to discontinue after census is the Friday that is two weeks before the published start date of the exams for the session. For an explanation of the WSU grade award, please see https://www.westernsydney.edu.au/currentstudents/current_students/exams/results . Students who have satisfactorily passed 1H assessments will be awarded a Y grade (Continuing) until their final grade for the Subject is determined after all assessments are completed for the subject. If a student has been awarded a Y grade (Continuing) in the subject, having completed at least one session of study, and subsequently withdraws from the subject, the Y grade will be converted to a 'F' grade (Fail) for the subject. In the event of serious illness or misadventure experienced by a student after the session 1H census date, the student may apply for a W grade (withdrawal without academic penalty) through the official University processes.

A student returning after a year of absence or repeating Year 3 in subsequent years cannot re-submit an assignment previously submitted during the year that was failed.

k) There are multiple nominated assessments in the table above. During 2023, the School of Medicine may move to an overall non-graded assessment system, whereby all the above will contribute to a satisfactory or not satisfactory overall assessment for ACS1. This won't affect individual assessments, but will mean that an overall numeric grade will not be given. Satisfactory ("pass") means a good overall competent standard for ACS1.Refer to the Assessment Policy https://policies.westernsydney.edu.au/document/view.current.php?id=227

Mode of Delivery	Type	Hours
	Clinical Placements	35 hours/week
	Conference Week Lectures	40 hours x 3 weeks
	Scientific Streams	2.5 hours/week (75 hours in total)

Refer to the Learning Guide for further details on Mode of Delivery. Students can only attend the classes for which they are registered and places are allocated via the Tutorial Registration (Allocate+) system. Visit http://www.westernsydney.edu.au/currentstudents/current_students/enrolment/tutorial_registration for information on the timetable and tutorial registration

Online Learning Requirements

See Learning Guide for details of requirements

Prescribed Subject Textbook

The Western Sydney University MD is an integrated 5-year professional entry program which emphasizes life-long and self-directed learning. Accordingly, there is no prescribed textbooks for Subjects in the MD program. A list of recommended textbooks is available in the Subject Learning Guide.

Essential Readings

Students will make extensive use of the on-line text books already available in the library.