

TEAMWORK STANDARDS – BIOMEDICAL SCIENCES

Adapted from the [AAC&U VALUE Rubrics](#) and acknowledged with thanks. See [Assuring Graduate Capabilities](#)

Definition: Teamwork, which is under the control of each member, includes the effort they put into tasks, manner of interacting with others and the quantity and quality of contributions. **VU Grad Cap Definition:** Work both autonomously and collaboratively.

Criteria	Competent	Novice	Beginner
	In addition to the skill set of Novice, graduates of this course can	In addition to the skill set of Beginner, students in the middle stages can	Students in the early stages can
VU Grad Caps matrix definition for Teamwork	W5 – Work individually and/or collaboratively with other others, to complete tasks and critically evaluate and respond to own and others' performance using established parameters.	W4 – Work individually and/or with others, as both a team member and leader in both formal and informal teams, to complete tasks, evaluate and respond to own and others' performance using given parameters.	W3 – Work individually, and/or with others, as both a team member and group leader, to complete tasks and evaluate own performance using given parameters.
Brainstorming to focus goal	Provide innovative and alternative ideas relevant to Biomedical Sciences (e.g. evidence based medicine, public health issues resulting from climate change).	Given a common goal, explore a wide range of ideas in Biomedical Sciences (e.g. physiological mechanisms that underlie health and disease, appropriate experimental design).	Learn about the importance of brain- storming, focusing on a goal, preparing (e.g. researching medical literature, thinking, time management) and team dynamics (e.g. listening, contributing equally, questioning) and apply to the teamwork task.
Preparation for team activity	Engage in productive peer review and synergistic collaboration. Assess own ability to contribute by drawing on prior knowledge of various approaches to medical research.	Engage in preparation (e.g. searching Pubmed), distribution and evaluation of team activities. Share equally the researching, planning, writing, editing and presenting of the project.	Contact members of the team and arrange a meeting time and place convenient to all members. Research some scientific databases for the task. Think about the topic prior to, and plan for, meetings.
Contribution to team activity	Follow good teamwork practices (e.g. apologies for non-attendance, speaking up in meetings, facilitate and commend the contributions of others, be inclusive). Ensure that all work is thorough, comprehensive and advances the project.	Exchange, defend and rethink ideas using scientific methodology. Interact, discuss and pose questions within a medical context. Exhibit good work habits (e.g. carefully edit the final draft).	Contribute to the task via preferred and/or allocated role (eg. icebreaker, record keeper or presenter). Contribute to discussions drawing on biomedical knowledge and experiences. Communicate effectively (e.g. attentive listening, goal focusing, accepting culturally diverse views).
Leadership of team activity	Take a turn as leader in a simulated workplace (e.g. chief investigator on a research project responsible for intellectual rigor, resources, ethics and quality control). Closely monitor group dynamics. Provide non-threatening, constructive criticism.	Provide significant assistance and encouragement. Refocus the team when needed. Choose appropriate leadership strategy for task: authoritative, facilitator, chair or liaison person. Develop decision-making processes and apply it effectively.	Motivate and encourage team mates, in an informal way. Learn about different types of leadership. Facilitate equity in distribution of tasks and contribution of multicultural team members.
Responsibility for personal interaction within the team	Accept responsibility for the overall outcome. Follow agreed processes for communication with external parties. Recognise destructive levels of conflict and work with group leader and members to resolve these.	Accept alternative viewpoints. Review the group dynamics, with assistance. Reduce conflict in a non-threatening way. Manage conflict by exhibiting willingness to compromise.	Accept the importance of diversity (e.g. gender, culture). Treat team members respectfully (e.g. speak one at a time, value contributions, display collaborative work habits). Approach the teacher if conflict emerges.
Reflection on team activity	Reflect on group dynamics, leadership and the deeper understanding gained from the activity. Apply the learning experience towards self-improvement and the next teamwork task.	Reflect on the importance of teamwork as a means of assuring quality of outcome. Assess the contributions of all team members, including self, and implement suggested improvements towards the next teamwork task.	Learn about the importance of self reflection. Self and peer assess the contributions of each team member. Apply learning experience to next teamwork task.

Exemplars	Unit: Wellness Co-ordinator: Wendy Probert	Unit: Functional Anatomy of the Head, Neck and Back Co-ordinator: Dr Kerry Dickson	Unit: Foundations in Biomedical Science Co-ordinators: Dr Kathy Tangalakis, Dr Deanne Skelly
Aim	<p>The Bendigo Bank Charity Challenge held in conjunction with VU Careers, presents an exciting opportunity for students to work in groups of 8-10 to develop and implement a fund-raising strategy for a charity of their choice and for this to occur in an external workplace. Bendigo Bank provides mentors for the groups. At the end of the challenge, students present their fundraising activity and money at a ceremony hosted by the bank. In the process, students enhance their knowledge of employer expectations, vocational options, work place and group dynamics, time and project management and skills in teamwork.</p>	<p>Many students studying Biomedical Science will continue to become members of a health care or medical research team (e.g. doctors, medical researchers). As professionals, they will be working with people who have complementary backgrounds and skills in an effort to improve medical care.</p> 	<p>Team work is essential in any profession. This first year unit offers students a practical way to engage in professional exchanges around broad topics in Biomedical Science. Students receive lectures on important aspects of team work, including the purpose of teams, roles within a team, effective team behaviour, goal setting, strategic planning, researching, contributing, leading, meeting deadlines, presenting and accepting cultural and personal diversity. They are also given information about database searching, appropriate scientific writing styles, correct referencing and anti plagiarism programs.</p>
Assessment	<p>Students work as a team to organize timelines, assign tasks, meet any requirements for fund-raising activities (e.g. appropriate choice of charity and fund-raising activities relevant to Wellness, permission, obtaining resources, advertising) and carrying out the fund-raising itself, including its challenges, obstacles and opportunities. Students prepare a group and an individual report worth 15% and 10%, respectively. The group report consists of a written report and an oral presentation. The group prepares, delivers and workshops a preliminary presentation of their project in class linking it to Wellness prior to the final presentation to the charity. Part of the project is to negotiate the tasks each student will undertake so that work is fairly distributed and completed on time. A second goal is to learn how to interact professionally with external partners and the public on behalf of an organization and as a member of a group. The group report includes a rationale for the choice of fund-raiser, the strategy used, the timeline for planned activities, the group dynamics and an evaluation of the project's challenges, opportunities, outcomes, benefits and improvements.</p>	<p>Although not assessed, students work in teams in a simulated work environment. They pretend to be a patient or health care worker (e.g. doctor and exercise physiologist) and use their knowledge of Anatomy to problem solve clinical cases. To do this, they must not only find the anatomical structures on wet specimens or plastic models, but also use living anatomy (surface anatomy). This requires students to have a heightened knowledge of team work in a health professional environment. For example, based on cultural norms, patients may have very different beliefs about ill health and death and very different means of communicating clinical signs and symptoms.</p>  <p>Students also work in teams conducting activities related to medical research. For example, they dissect, remove, fix and stain tissues for histological analyses. This extends their learning about teamwork.</p>	<p>Students conduct a group project which forms 50% of the assessment in the unit. Each group consists of 3 students. Students are required to research and present information in one of the following areas: Dementias, Muscular Dystrophies, Stem Cells, Congenital Heart Defects. Their group project consists of 3 parts: literature review, written report and Powerpoint oral presentation. Students will be given multiple opportunities to give and receive feedback in different contexts to support learning, improve individual contribution to group work and improve the group work experience, using the e-learning tool SPARK^{PLUS}. The written report describes each group's research focus and should be equally contributed by all 3 authors. It should contain an introduction (overview), body (detailed and integrated description of main points from 5 journal articles) and judgement (identify societal implications of research, links to potential future careers, reflections on the challenges of this research in the future). The written project should be ~ 1000 words. The Powerpoint presentation should be a summary of the written paper and it should contain a maximum of 10 slides. The oral presentation should include some reflection on what students learnt from the team work and about teamwork.</p>